

# Health camps planned to control rising addiction among adolescents

The National Health Mission held a meeting last month with mental experts to discuss the issue; first camp is likely to be held in Kannagi Nagar and parents will be asked to attend the camps; councillor wants camps held in all wards

**Aloysius Xavier Lopez**  
CHENNAI

The State government has asked the Greater Chennai Corporation, Tamil Nadu Urban Habitat Development Board (TNUHDB) and other agencies, with support from the Institute of Mental Health, Kilpauk, to hold "health and wellness camps" in settlements such as Kannagi Nagar to control the rising addiction and drug abuse among adolescents and adults.

Guided by Chief Secretary V. Irai Anbu, the National Health Mission (NHM), Tamil Nadu, has asked the Corporation to provide "support and coordination"



Drug addiction and substance abuse are said to be rising among urban communities. M. KARUNAKARAN

for conducting the camps in the city.

According to the minutes of the meeting held last month, prevalence of addiction, substance abuse

and drug abuse has been noticed in urban communities in areas such as Kannagi Nagar.

The first camp is likely to be held at Kannagi Nagar

in Sholinganallur zone.

"The area comprises people from economically weaker sections displaced from settlements across the MRTS line. Like any socio-economically weaker group in an Indian setting, alcohol and substance abuse and drug abuse is prevalent among men, women, and adolescents. Sometimes children also unknowingly get drawn into consumption," said an official.

## Minister's order

On the instruction of Health Minister Ma. Subramanian, a meeting was convened at the NHM with mental health experts to address the issue.

"It was decided to initiate a health and wellness camp for adolescents and adults in Kannagi Nagar in Chennai. Parents of the children will be persuaded to participate in the camp," said an official.

T.V. Shemmozhi, councillor of Ward No. 104 in Anna Nagar, said the health and wellness camps should be conducted in all the 200 wards.

"Several adolescents have been damaging civic infrastructure such as streetlights so that they get dark spots for substance and drug abuse. They are reportedly involved in crime. We should sensitise all residents," said Mr. Shemmozhi.

## Strong winds batter Gujarat as cyclone makes landfall

**Mahesh Langa**  
AHMEDABAD

The severe cyclonic storm Biparjoy made landfall near Jakhau Port in Gujarat's Kutch district on Thursday night after churning across the Arabian Sea for over 10 days, the India Meteorological Department (IMD) said.

Strong winds and heavy rain battered the Kutch and Saurashtra coasts from Thursday morning as State and Central agencies remained on high alert. Two drowned in flood waters in Saurashtra.

The Railways cancelled or short-terminated more than 70 trains. Around one lakh people living in vulnerable areas have been evacuated to 1,500 tem-



**Relief mode:** Huge waves lash Valsad in Gujarat on Thursday. ANI

porary shelters set up as part of the State's disaster management efforts after the IMD's warning of the storm's "extensive damaging potential".

**Power supply disrupted**  
Several areas in coastal districts plunged into darkness as the strong winds disrupted power supply.

There were reports of hundreds of trees, hoardings and electric poles being uprooted in coastal districts. Many houses were damaged. Due to strong winds, coal stored in storage grounds in Okha and Jamnagar caught fire.

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## Winds batter Gujarat as cyclone makes landfall

Many people recalled the devastation caused by a massive cyclone exactly 25 years ago in June 1998, when over 3,000 people were killed in Kutch and the coastal areas of Saurashtra.

Prime Minister Narendra Modi had a telephonic talk with Gujarat Chief Minister Bhupendra Patel who briefed him on the ground situation. Mr. Patel held several meetings at the State emergency operation centre to take stock of the relief operations. Food packets are being delivered by government agencies at all temporary shelters, while Opposition party leaders and NGOs have also joined the rescue and relief efforts.

Apart from 30 National and State Disaster Response Force teams, personnel from the Army, Navy, Air Force, Coast Guard and Border Security Force have been deployed in eight coastal districts where the IMD has issued a red alert.

The IMD had earlier warned of very heavy (11.5 cm to 20.4 cm) to extremely heavy rainfall (over 20.5 cm) in Kutch, Devbhumi Dwarka, Jamnagar, Porbandar, Rajkot, Morbi and Junagarh districts. "We won't be surprised if some areas record more than 25 cm of rainfall. Therefore, there is a risk of flooding in the low-lying areas," IMD Director General Mrutyunjay Mohapatra had said.

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### **'Women can benefit in a big way from care services sector'**

The G-20 Summit should focus on developing a care economy and eliminate bias against women in technology and related sectors, said Smriti Irani, Union Minister for Women and Child Development. At the release of the communique at the final summit of the W20 engagement group at Mamallapuram on Thursday, she said: "When you discuss gender and technology, let us also ponder over what AI (artificial intelligence) brings to women. An additional focus on care services has a potential to create 300 million extra jobs that will predominantly go to women," she said. G20 Sherpa Amitabh Kant called for changes to bring gender equality in 15 years. Shombi Sharp, United Nations Resident Coordinator, India, Shamika Ravi, chair of the W20 communique drafting committee, W20 chair Sandhya Purecha and Dharitri Patnaik, chief coordinator of W20, spoke.

### **IIT-Madras designs device to monitor air quality**

**The Hindu Bureau**  
CHENNAI

Researchers at the Indian Institute of Technology Madras have developed a low-cost mobile air pollution monitoring framework.

Traditionally, ambient air quality is monitored in monitoring stations which then report air quality index (AQI). But the hitch is that the monitoring occurs only for a small geographic area. As the levels can vary at different times of the day and setting up locations in more places is impractical, the researchers have now developed a new IoT-based mobile technology which would make it possible to map an entire city at high resolution using the low-cost devices.

Raghunathan Rengaswamy, dean, global engagement of IIT-M, and faculty in the department of chemical engineering, led the research.

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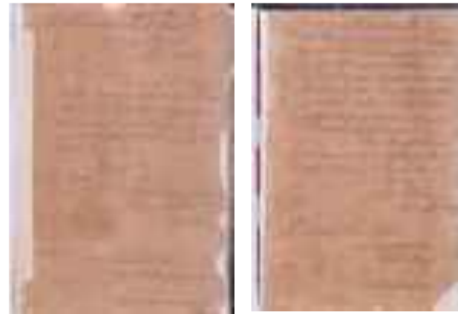
## Letter alerting British military about Marudu brothers' Srirangam declaration discovered

**B. Kolappan**  
CHENNAI

A rare letter alerting the East India Company's top military officials to the revolt of the Marudu Brothers of Sivaganga against the British has been discovered in the Government Archives in Chennai.

It was a communiqué about **Srirangam Prakadanam** (declaration) or **Jamputheevu Prakadanam** made by the **Marudu Brothers on June 16, 1801**, urging people to revolt against the British. **Jamputheevu**, also known as **Navalamtheevu**, is another name for India as it is surrounded by seas on three sides. **The discovery marks the 222<sup>nd</sup> anniversary of the declaration.**

"Wherever you find any of the low wretches, destroy them and continue to do so until they are exported. Whoever serves the



The letter of Chief Secretary to the Governor J. Webbe, intimating Lieutenant Colonel Agnew of the Marudu Brothers' declaration of war against the British. SPECIAL ARRANGEMENT

low wretches will never enjoy eternal bliss after death, I know this," says the declaration of the younger Marudu brother, who calls himself the "servant of the great Rajahs, but the implacable enemy of the European low wretches". **The declaration was posted up on Nawab's palace in the Tiruchi fort,**

**and on the walls of one of the 'Poligars' (Palayakars) at Srirangam.**

The copies of it, described as "inflammatory papers", were removed and Chief Secretary to the Governor J. Webbe wrote a letter to Lieutenant Colonel Agnew, who was commanding the forces in southern districts, about

**The letter was found by G. Prakash, Commissioner of Archives and Historical Research; K. Vijayaraj, who is in charge of archives; and R. Chitthanai, a staff member**

the declaration.

The British officials translated the declaration verbatim and enclosed it with the letter to Agnew. The letter, dated July 10, was discovered by G. Prakash, Commissioner of Archives and Historical Research; K. Vijayaraj, who is in charge of the archives; and R. Chitthanai, a staff member. "I am really grateful to Mr. Prakash and others who were able to trace the papers that tell the valiant struggle of the Marudu Brothers against the British," said former IAS officer

M. Rajendran.

The notice by Marudu Brothers was given "to the Brahmins, Kshatriyas, Vysyas, Sudras and Musselmen [Muslims] in the Island of Jamboo/in the Peninsula of Jamboo Dweepa." It said, "Whoever reads this or hears of its contents, let him make it public." "Everyone who shall not write it and circulate it as mentioned before, let him be held as guilty of the enormous crime of having killed a 'Karam Pasu' (a black cow) on the banks of the Ganga and suffer all the punishments of hell," the declaration warned.

**Brothers defeated**

But the British pre-empted the Marudu Brothers. Four months after the declaration, they waged a war, defeated the **brothers and hanged them at Tirupattur on October 24, 1801.**

## **Code red**

The push for a uniform civil code should not become a divisive tool

**T**he Law Commission's decision to solicit views from the public on the idea of a uniform civil code appears to be a political initiative aimed at bringing the potentially divisive issue under focus in the run-up to next year's general election. The Commission, the 22nd such panel, has claimed that years have elapsed since similar views were sought by the previous panel, and that a fresh effort was needed to garner varied opinions. The 21st Commission had released a consultation paper in 2018 that categorically said a uniform civil code was "neither necessary nor desirable" at that stage. In a well-reasoned document, it had then argued that the focus of initiatives to reform the various personal laws should be the elimination of all forms of discrimination rather than an attempt to bring about uniformity in the laws governing various religions. The document was progressive in nature, inasmuch as it emphasised non-discrimination over uniformity, and recognised that there could be diverse means of governing aspects of personal law such as marriage, divorce, inheritance and adoption instead of imposing a single set of rules on society. This would entail the removal of discriminatory provisions, especially those that affect women, and adoption of some overarching norms rooted in equality. Nothing significant has happened since to warrant a fresh look, except perhaps a political need for the current dispensation to bring the issue to the electoral arena.

A uniform civil code for the entire country is indeed a lofty goal, but the question whether introducing one for all aspects of personal law would impinge on the freedom of religion has been part of the debate. B.R. Ambedkar viewed it as desirable, but favoured its being voluntary. It is possible that a uniform code may be adopted without offending any religion, but the concept evokes fear among sections of the minorities that their religious beliefs, seen as the source of their personal laws, may be undermined. In fraught times such as the present, a common code will inevitably be seen as an imposition by the majority. Basic reforms can be given priority – such as having 18 as the marriageable age for all across communities and genders. Introducing a 'no-fault' divorce procedure and allowing dissolution of marriage on the ground of irretrievable breakdown, and having common norms for post-divorce division of assets were other matters the previous Commission threw up for a debate. Within each community's laws, it will be desirable to first incorporate universal principles of equality and non-discrimination and eliminate practices based on taboos and stereotypes.

## *Is the Indian Railways stretched beyond its capacity?*

### PARLEY



On June 2, an accident involving three trains took place in Balasore district of Odisha. It claimed 288 lives and left more 1,200 people injured. The tragedy has left several questions in its wake about safety, signalling, and overcrowding. In a conversation moderated by **Maitri Porecha**, Mahesh Mangal and Sudhanshu Mani discuss whether the Indian Railways is stretched beyond its capacity. Edited excerpts:

**When maintenance works of the Railways are undertaken, automatic signalling is stopped and there is manual takeover of the system. In 2015, inspecting officials found that station masters and signal maintainers could cite safety literature, but were unable to answer questions on it. They found that mock drills had not been conducted at all points, safety clamps had not been greased, and locks and keys had not been numbered properly. Some relay rooms were found to be open. The automatic signalling system may be designed to fall on the side of safety, but how do we strengthen manual systems?**

**Mahesh Mangal:** First, regarding inspections and shortcomings, the Railways system is vast. Inspections are regularly carried out by supervisors and officers, training is regularly done, and feedback is also regularly obtained. Some of these things that you cited happen because of lack of sincerity of the staff. But such incidents are not regular occurrences. Otherwise, we cannot operate 20,000 trains daily on 7,000 or 8,000 stations. Most trains are punctual and run properly. There is some slack, yes, but not to a large extent.

**Sudhanshu Mani:** There have been such incidents, but these do not mean there is laxity and lack of safety overall. These are instances which point to how systems need to be improved in those particular areas as and when they are noticed. Of course, you can't ever do enough as far as safety is concerned. Although the safety record of the Railways has been improving drastically over the years, this accident has cast a big shadow on our record. There is a need to look at the safety systems afresh. And the culture safety rules supreme. Punctuality and other aspects of the Railways have to be built into it.

**There has been a lot of chatter about Kavach, the anti-collision device. Could it have helped or not? And if not, what are some**



Passengers travel in Coromandel Express. BISWARANJAN ROUT

### methods to correct issues of signalling?

**MM:** We did provide anti-collision features and these systems do provide some kind of protection. Kavach would have been of little use in this particular case. In case the train enters the wrong line – suppose it was given the signal for the main line but entered the loop line due to some kind of interference with the signalling system – it would immediately apply an emergency brake. But in this case, the loop line was occupied. And the distance between the stationary goods train and the point from which the Coromandel Express entered the loop line was hardly 100-150 metres. The braking distance of such a train at 130 kilometres per hour would be more than 600 metres. So, Kavach would have made a little bit of a difference in the sense that the impact might have reduced, but it would not have prevented the accident.

**SM:** One can do an impact analysis and know how much Kavach would have helped. Since the front coaches of the Coromandel Express were, I think, overcrowded, I doubt if the fatalities would have reduced substantially.

There has been a lot of talk about Kavach not being there. It's been under development since 2012. The speed of the Kavach roll-out should be increased. It is going to make the system safer, on a par with the European rail system. And it will also increase the capacity of the system because it gives an advanced warning to the driver. It has multiple advantages. The roll-out is just 4%, so we need faster implementation.

**You spoke about the general bogeys. Migrant workers often travel in these general compartments which cost only ₹370 a ticket. Sometimes their employers give them sleeper class tickets. How does overcrowding impact the way coaches are designed?**

**SM:** Overcrowding is a fact. Sometimes



The lack of safety results in such an accident only once in a while whereas [lack of] punctuality results in delays of trains. That is why more emphasis is given to punctuality, and safety, to an extent, takes a backseat.

**MAHESH MANGAL**

compartments are filled three-four times their capacity. You will hear people saying that these passengers don't pay enough and so they travel like that, but that's not what you see in a developed country. We have to work assuming that we become a developed country. And that would mean every Indian has to travel with dignity, if not great comfort. Dignity means a seat or a berth for everyone. Now, it may appear to be impossible looking at the way trains are run today, but I don't believe that it is impossible. More stress is required on elite trains, which are remunerative. That money can be used to run longer trains or design coaches which can accommodate more passengers.

**MM:** I don't think that [accidents] can happen with overcrowding. You see how trains operate in the Mumbai Suburban Railway. During peak hour, the trains are filled more than two-three times the capacity. Yet, people travel in these trains as other means of transportation are not available, or are costly, or difficult to adopt.

**In India, there are some high-density routes such as the Howrah-Chennai route or the Delhi-Mumbai route. In these cases, you need to balance punctuality with safety. Does this leave little time for any block maintenance works on tracks, for instance?**

**MM:** Most of these sections operate at more than the design capacity of the double-line sections. So, definitely there is a pressure on giving blocks (blocking tracks against movement of traffic over a particular section to allow for maintenance works) and giving disconnection (which is disconnecting automatic signalling so that manual controls can take over for the setting of routes) and ensuring punctuality. We have a working timetable which helps us block a period between some mail/express trains. This has to be followed by the controllers who operate the trains. Often this is not followed because trains run late. And so they are unable to give the two-hour periods which are available for the block. Punctuality is monitored 24x7. There is awareness among all the staff regarding safety. The lack of safety results in such an accident

only once in a while whereas [lack of] punctuality results in delays of trains. So, that is why more emphasis is given to punctuality, and safety, to an extent, takes a backseat.

**SM:** Safety cannot be traded with anything. I've been reading ridiculous suggestions such as 'the speed of trains should be reduced'. This is retrograde. We have to increase speed, but also bring in systems that will ensure safety. You can have even higher speed without any compromise on safety. Safety has to take primacy over punctuality. Punctuality can be improved and it can be made safer with inputs. And with heavy induction of funds for track renewals. We have eliminated unmanned level crossings, but the time has come to eliminate manned level crossings, which can cause delays. So, grade separation is the solution. There is a need for more focus on coverage, track renewal and elimination of level crossings.

**The Commission of Railway Safety (CRS), which is under the aegis of the Ministry of Aviation, has taken over the investigation into the Balasore accident. Simultaneously, there is a CBI inquiry going on. Why is the CRS under the Ministry of Aviation?**

**SM:** The Commissioner of Railway Safety is a former member of the Railways who cannot go back to the Railways after joining this organisation, and works under the Ministry of Civil Aviation. So, the CRS has independence from the Railways hierarchy. The system has worked well. They have made strong recommendations over the years. I cannot comment on why the CBI probe was ordered. Since this was a massive accident, I wish the government had ordered a judicial probe. By and large, a judicial probe is considered the ultimate impartial probe in our country.

**MM:** For most accidents, an enquiry by the CRS has given good results, it has been quite quick. And as the investigators are formerly from the Railways, they know the system and can explore technical aspects. And they can give good recommendations. But yes, for all major accidents, it is better to have a judicial probe. Possibly, the judiciary will look at it from a different angle, not from a tactical angle but from the (shortage of) manpower angle too.



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# India to buy 31 MQ-9 Reaper UAVs; announcement during PM's U.S. trip

**Dinakar Peri**  
NEW DELHI

Ahead of Prime Minister Narendra Modi's visit to the U.S., the Defence Acquisition Council on Thursday approved the procurement of 31 armed MQ-9 Reaper Unmanned Aerial Vehicles (UAVs) from General Atomics, defence sources confirmed. The deal is now awaiting final approval from the Cabinet Committee on Security and is expected to be announced during next week's visit.

The long-pending proposal to buy the high-altitude long-endurance armed UAVs was on the agenda of the council, which is chaired by Defence Minister Rajnath Singh, when it met on Thursday, two sources said. They also confirmed that the council approved the deal, which will be executed through the Foreign Military Sales route of the



**Boosting security:** Of the 31 UAVs to be procured, 15 are meant for the Navy and eight each for the Army and Air Force. ANI

U.S. government. Of the 31 UAVs to be procured, 15 are meant for the Navy and eight each for the Army and Air Force. The total cost, estimated at more than \$3 billion, also includes those for maintenance, overhaul and repair of the platforms, Indian officials said.

#### **Navy's pressing need**

Earlier, the plan was to buy 30 UAVs, with 10 for each service. However, the Navy

has the most pressing requirement for these platforms, which will significantly enhance its maritime surveillance capability over the Indian Ocean Region while reducing the stress on the P-8I maritime patrol aircraft.

In December, Navy chief Admiral R. Hari Kumar had said that the deal was in progress and at a stage "where we are discussing if numbers need to be rationalised or kept as it is". The

Navy leased two MQ-9As in 2020, and have since extended that lease. In November 2022, General Atomics announced that these leased UAVs had completed 10,000 flight hours in two years since their maiden flight on November 21, 2020, and have helped the Navy to cover over 14 million square miles of operating area.

#### **HAL collaboration**

At Aero India in Bengaluru in February, Hindustan Aeronautics Ltd. (HAL) and General Atomics announced that the turbo-propeller engines which power the MQ-9 would be supported by HAL's engine division for the Indian market. The companies are looking to formulate a comprehensive engine maintenance, repair and overhaul programme for upcoming high altitude long endurance UAV projects, they said in a joint statement.

# Is the ranking system of colleges flawed?

Is the National Institutional Ranking Framework's method of assessment and scoring universities and colleges sound? Why are experts arguing against too much emphasis on bibliometric indicators? Does it lack transparency? Does the current ranking process lead to unhealthy competition?

## EXPLAINER

Moumita Koley

### The story so far:

In a country as diverse as India, ranking universities and institutions is not an easy task. The Ministry of Education established the National Institutional Ranking Framework (NIRF) in 2016 to determine the critical indicators in which institutions' performance could be measured. Since then, institutions nationwide, including universities and colleges, eagerly await their standings in this nationally recognised system every year.

### How does the NIRF rank institutes?

Currently, the NIRF releases rankings across various categories: 'Overall', 'Research Institutions', 'Universities', and 'Colleges', and specific disciplines like engineering, management, pharmacy, law, etc. The rankings are an important resource for prospective students navigating the labyrinth of higher education institutions in India.

NIRF ranks institutes by their total score and it uses five indicators to determine this score – 'Teaching, Learning & Resources' (30% weightage); 'Research and Professional Practice' (30%); 'Graduation Outcomes' (20%); 'Outreach and Inclusivity' (10%); and 'Perception' (10%). Academic communities have had concerns about the construction of these indicators, the transparency of the methods used, and the overall framework. An important part of it is focused on the research and professional practices part of the evaluation because they pay a lot of attention to bibliometric measures.

### What are bibliometrics?

Bibliometrics refers to the measurable aspects of research, such as the number of papers published, the number of times they are cited, and the impact factors of journals. The allure of bibliometrics as a



Rat racer: A man walks past the campus of the Indian Institute of Technology, in Chennai. (UPI)

tool for assessing research output lies in its efficiency and convenience compared to qualitative assessments performed by subject experts, which are more resource-intensive and require time.

However, science policy experts have cautioned authorities against relying too much on bibliometrics as a complete assessment. They argued that bibliometric indicators don't fully capture the intricacies of scientific performance, and that we need a more comprehensive evaluation methodology.

The journal *Science* recently reported that a dental college in Chennai was using "nasty self-citation practices on an industrial scale" to inflate its rankings. They reported the use of bibliometric parameters to understand the research impact of institutions as well as the risk of

a metric becoming the target.

### What is the issue with overly relying on bibliometrics?

This criticism has been levelled against the NIRF vis-a-vis the efficacy and fairness of its approach to ranking universities. For example, the NIRF uses commercial databases, such as 'Scopus' and 'Web of Science', to get bibliometric data. But these entities aren't impervious to inaccuracies or misuse. Recently, 'Web of Science' had to delist around 50 journals, including a flagship journal of the publisher MDPI.

The NIRF's publication-metrics indicator solely considers research articles, sidelining other forms of intellectual contributions, such as books, book chapters, monographs,

non-traditional outputs like popular articles, workshop reports, and other forms of grey literature.

As a result, the NIRF passively encourages researchers to focus on work that is likelier to be published in journals, especially international journals, at the cost of work that the NIRF isn't likely to pay attention to. This in turn disprivileges work that focuses on national and local issues, as international journals prefer work on topics of global significance.

### Is the NIRF transparent?

University rankings are controversial. NIRF, the Times Higher Education World University Rankings, and the QS World University Rankings all have flaws.

Experts have emphasised that they ought to be transparent about the data they collect, the sources and how they collect it, and how that data becomes the basis for the total score. The NIRF is partly transparent as it publicly shares its methodology, but it doesn't provide a detailed view.

The framework for assessment and scoring are based on bibliometric data. However, there is a potential discrepancy in how they label research quantity and quality. The labels in question are imprecise and potentially misleading.

### What's the overall effect on the NIRF?

The case of the dental college is emblematic of the dangers of over-relying on one type of assessment criterion, and it opens a door to manipulation and obscures the true performance of an institution.

No matter how rigorous the methods, university rankings invariably involve some level of ambiguity. The NIRF's emphasis on rankings can lead to unhealthy competition between universities, fostering a culture that puts metrics in front of the thing they are trying to measure: excellence in education and research.

Dr. Moumita Koley is a consultant with the Future of Scientific Publishing project and an STI policy researcher.



# Are non-communicable diseases increasing in India?

What are the causes of such an increase? What are these figures trying to tell us? Which States are highly prone to NCDs? How can we stop this developing problem?

**Bindu Shajan Perappadan**

## The story so far:

**T**he new national estimates for diabetes and other non-communicable diseases (NCD) shows that 31 million more Indians became diabetic in four years (2019-2021).

## What were the findings?

In 2021, a study found that India has 101 million people with diabetes and 136 million people with prediabetes. Additionally, 315 million people had high blood pressure; 254 million had generalised obesity, and 351 million had abdominal obesity. 213 million people had hypercholesterolaemia (wherein fat collects in arteries and puts individuals at greater risk of heart attack and strokes) and 185 million had high low-density lipoprotein (LDL) cholesterol. The decade-long nationwide study was funded by the Indian Council of Medical Research

and Department of Health Research, Ministry of Health and Family Welfare and co-ordinated by the Madras Diabetes Research Foundation. The results of the study are to be published in *The Lancet Diabetes and Endocrinology* journal.

## What is the significance of the study?

The study is the first comprehensive epidemiological research paper which includes participants from 31 States and some Union Territories, with a large sample size of 1,13,043 individuals. There are two big trend indicators in the study.

First, diabetes and other metabolic non-communicable diseases, such as hypertension, obesity and dyslipidemia are much more common than estimated previously in India and second, while currently urban regions had higher rates of all metabolic NCDs than rural areas, with the exception of prediabetes, rural India will see a diabetes explosion in the next five years if left unregulated.

The study also highlights interstate and

inter-regional variations. The highest diabetes prevalence was found in Goa, Puducherry and Kerala. While prediabetes was prevalent in Sikkim, hypertension was highest in Punjab. Generalised obesity and abdominal obesity were highest in Puducherry, while Kerala had high hypercholesterolemia and high LDL cholesterol. The lowest prevalence of NCDs was found in U.P., Mizoram, Meghalaya and Jharkhand. This cross-sectional, population based survey of adults aged above 20 years, across the country uses a stratified, multistage sampling design in the study titled – "Metabolic non-communicable health report of India-the ICMR-INDIAB National Cross-sectional Study."

While the diabetes epidemic is stabilising in the more developed States of the country, it is still increasing in most of the other States. Thus, there are serious implications for the nation, warranting urgent State-specific policies and

interventions to arrest the rapidly rising epidemic of metabolic NCDs in India.

## How does this study impact India?

While India in the past four years has substantially added to its burden of diabetics and hypertensive persons with generalised and abdominal obesity, the study gives us an early warning that if not controlled, this population is predisposed to NCDs and life-altering medical conditions including strokes.

Experts have explained that India is facing the dual problem of malnutrition and obesity. There is availability of surplus food, but after being exposed to fast foods, a lack of sleep, exercise and stress creates a perfect setting for NCDs to latch-on.

## What is the way forward?

The answer to this developing problem, is in wellness and in having a lifestyle that encompasses healthy diet and exercise. NCDs have also been one of the major concerns of the Health Ministry. It has identified the four major NCDs – cardiovascular diseases, cancers, chronic respiratory diseases and diabetes. They all share four behavioural risk factors – unhealthy diet, lack of physical activity, and use of tobacco and alcohol.

Programmes have been brought in to strengthen health infrastructure, human resource development, health-promotion and awareness-generation for prevention, early diagnosis and ensuring referrals to appropriate healthcare facilities for NCDs.