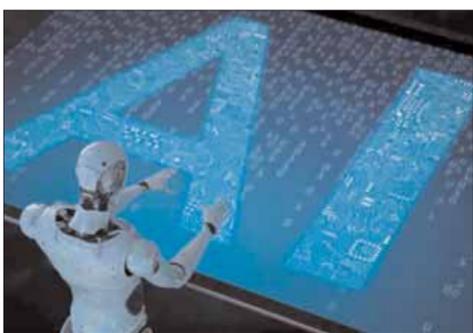


AI-model developed to predict irregular heartbeat 30 minutes before onset in new study

NEW DELHI, APR 23: Researchers have developed a new AI-based model that can predict irregular heartbeat, or cardiac arrhythmia, about 30 minutes before its onset.

The researchers found that the model proved to be 80 per cent accurate in predicting the transition from a normal cardiac rhythm to atrial fibrillation, the most common type of cardiac arrhythmia in which the heart's upper chambers (atria) beat irregularly and are out of sync with the lower ones (ventricles).

The team, including researchers at the University of Luxembourg, said that their AI-model, which gives early warnings, could be easily installed in smartphones to process the data recorded on smartwatches. The warnings could allow patients to take preventive measures to keep their cardiac rhythm stable, they said. The study



is published in the journal Patterns.

For developing the model, the team trained it on 24 hour-long recordings gathered from 350 patients at Tongji Hospital in Wuhan, China. The model, that the researchers have named WARN (Warning of Atrial fibrillation), is based on deep-learning, a type of machine-learning AI algorithms that learn patterns from past data to make predictions.

Deep-learning is more specialised as it has multiple layers in its decision-making process.

The researchers found that WARN gave early warnings, on average 30 minutes before the start of atrial fibrillation, and is the first method to provide a warning far from onset, they said. "We used heart rate data to train a deep learning model that can recognise different phases -- (normal) sinus rhythm, pre-atrial fibrilla-

tion and atrial fibrillation -- and calculate a 'probability of danger' that the patient will have an imminent episode," Jorge Goncalves, from the Luxembourg Centre for Systems Biomedicine (LCSB), University of Luxembourg, and the study's corresponding author, said. When approaching atrial fibrillation, the probability increases until it crosses a specific threshold, providing an early warning, Goncalves said.

Being of low computational cost, the AI-model is "ideal for integration into wearable technologies," the researchers said.

"These devices can be used by patients on a daily basis, so our results open possibilities for the development of real-time monitoring and early warnings from comfortable wearable devices," study author Arthur Montanari, an LCSB researcher, said.

Diamonds hidden in noodle packets, gold valued at Rs 6.46 crore seized at Mumbai airport; four held

MUMBAI, APR 23: The Customs department has seized diamonds concealed in packets of noodles and gold hidden in the body parts of passengers and baggage, collectively valued at Rs 6.46 crore, at the Mumbai airport, an official said.

Four passengers were arrested after the seizure of more than 6.815 kg of gold valued at Rs 4.44 crore and diamonds of Rs 2.02 crore over the weekend, the Customs official said in a release issued late Monday night.

An Indian national travelling from Mumbai to



Bangkok was intercepted and found smuggling the diamonds concealed in packets of noodles inside his trolley bag.

The passenger was later arrested, the official said.

A foreign national travelling from Colombo to Mumbai was intercepted

and found carrying gold bars and a cut piece, with a net weight of 321 grams, concealed inside her undergarments, he said.

Besides, 10 Indian nationals - two each travelling from Dubai and Abu Dhabi, and one each from Bahrain, Doha, Riyadh, Muscat, Bangkok and Singapore - were also intercepted and found carrying 6.199 kg gold, valued at Rs 4.04 crore, "concealed in the rectum, on body and inside the baggage," the release said without providing further details.

Three of them were subsequently arrested, it said.

Lok Sabha polls: Akhilesh Yadav says public insulted in Surat, demands restart of election process

LUCKNOW, APR 23: A day after the BJP candidate from Gujarat's Surat Lok Sabha seat was elected unopposed, Samajwadi Party chief Akhilesh Yadav on Tuesday said the public has been insulted in the constituency and demanded that the election process should be started afresh.

In a post on X, Yadav called on the Election Commission (EC) and the Supreme Court to take suo moto cognisance of the matter.

"The public has been insulted in Surat. They were not even allowed to cast their votes. We have been saying that the BJP will snatch the right to vote. See, that is what has happened," the SP chief said in his post in Hindi.

"This is also the murder



of the Constitution because the people who win through such rigging are not the elected representatives of the public," he said.

The BJP is "defying" the EC and the poll panel should take action, he added.

The BJP on Monday won its first seat in the ongoing Lok Sabha polls as its Surat nominee Mukesh Dalal was

elected unopposed after the nomination Niles Kumbhani was rejected and others withdrew from the fray.

Those who withdrew their nominations were four Independents, BSP's Pyarelal Bharti and three candidates from smaller parties.

Yadav further said that the election process in

Surat should be started afresh.

"Like the Chandigarh mayoral polls, we once again appeal to the Supreme Court and the Election Commission to take suo motu cognisance of what happened in Surat, cancel the election and give the harshest punishment to all conspirators. The election process should be started afresh in Surat," he said.

In February, the Supreme Court set aside the result of the January 30 Chandigarh mayoral polls and instead declared the AAP-Congress alliance candidate Kuldeep Kumar as the mayor, saying the returning officer put marks on eight ballots cast in Kumar's favour to create a ground for treating them as invalid.

CAA patently discriminatory, must go; should be replaced by law of asylum: P Chidambaram

NEW DELHI, APR 23: Asserting that the Citizenship Amendment Act (CAA) is "patently discriminatory", senior Congress leader P Chidambaram on Tuesday said his party's position is that it must go and be replaced by a law of asylum which is consistent with international treaties to which India is a party.

His remarks came in response to Home Minister Amit Shah's criticism of the Congress over its stand on the controversial CAA.

A day after Chidambaram said his party will repeal the CAA if voted to power, Shah had said on Monday that the Congress is "hell-bent on harming" Hindu, Buddhist, Jain, Christian, Sikh and Parsi communities to appease its vote bank.

Asked about Shah's criticism of his remarks, Chidambaram told PTI, "It is not only my remark. Several Congress leaders have stated the position. We oppose the CAA when it was introduced in Parliament. Our members have visited the Shaheen Bagh protest. I myself visited the Kolkata



protest and we stand in solidarity with those who protested against the CAA." "The CAA is patently discriminatory. We are restrained because the matter is sub-judice in the Supreme Court but our views are quite clear, the CAA is patently discriminatory, it selects three countries and six religious groups, for example, it leaves out the Tamils of Sri Lanka, it leaves out the Tamils of Myanmar. Why?" he said.

"The Tamils are Tamil-speaking, they are Hindus, Muslims. Why is the Tamil Hindu in Sri Lanka who is subject to oppression not allowed to migrate to India

if he satisfies the conditions of asylum? Therefore, our position is the CAA must go, we must replace it by a law of asylum which is consistent with international treaties to which India is a party," the former home minister said.

On Shah's remarks that one needs to be in government to change laws and it's not possible for the Congress to become even the main opposition party, Chidambaram said, "Thank God the Election Commission of India is different from the Ministry of Home Affairs and thank god the people of India are independent of the Election commission of India."

Chidambaram said there is a long list of laws, for example the Prevention of Money Laundering Act, 2002, that need to be reviewed, repealed or amended.

He said the PMLA law has to be repealed and re-enacted in order to be consistent with international conventions on money laundering.

"Our law is clearly in violation of Indian law as well as the international convention," he said on PMLA.

"Similarly, there are many laws which they have made that have diluted the purpose of the law, which have distorted the laws, for example environmental laws have been amended, forest laws have been amended, all that has to be reversed. We have said so in a chapter (in the manifesto) in reversing the damage," Chidambaram said.

"We did not want to add a list as it runs into at least two pages. Several laws have to be reviewed, some will be repealed, some will be repealed and re-enacted and some will be amended," he added.

Abortion returns to the spotlight in Italy 46 years after it was legalised

ROME, APRIL 23: Italian Premier Giorgia Meloni's far-right-led government wants to allow anti-abortion groups access to women considering ending their pregnancies, reviving tensions around abortion in Italy 46 years after it was legalised in the overwhelmingly Catholic country.

The Senate on Tuesday was voting on legislation tied to the European Union Covid recovery funds that includes an amendment sponsored by Meloni's Brothers of Italy party. The text, already passed by the lower Chamber of Deputies, allows regions to permit groups "with a qualified experience supporting motherhood" to have access to public support centres where women considering abortions go to receive counselling.

For the right, the amendment merely fulfils the original intent of the 1978 law legalising abortion, known as Law 194, which includes provisions to prevent the procedure and support motherhood.

For the left-wing opposition, the amendment marks a chipping away of abortion rights that opponents warned would follow Meloni's 2022 election.

"The government should realise that they keep saying they absolutely do not



want to boycott or touch Law 194, but the truth is that the right-wing opposes women's reproductive autonomy, fears women's choices regarding motherhood, sexuality, and abortion," Cecilia D'Elia, a Democratic Party senator, said at a protest this week against the legislation.

Under the 1978 law, Italy allows abortion on request in the first 12 weeks of pregnancy, or later if a woman's health or life is endangered. It provides for publicly funded counselling centres to advise pregnant women of their rights and services offered if they want to terminate the pregnancies.

But easy access to abortion isn't always guaranteed. The law allows health care personnel to register as conscientious objectors and refuse to perform abor-

tions, and many have, meaning women sometimes have to travel far to have the procedure.

Meloni, who campaigned on a slogan of "God, fatherland and family," has insisted she won't roll back the 1978 law and merely wants to implement it fully. But she has also prioritised encouraging women to have babies to reverse Italy's demographic crisis.

Italy's birth rate, already one of the lowest in the world, has been falling steadily for about 15 years and reached a record low last year with 379,000 babies born. Meloni's conservative forces, backed strongly by the Vatican, have mounted a campaign to encourage at least 500,000 births annually by 2033, a rate that demographers say is necessary to prevent the economy from

collapsing under the weight of Italy's aging population.

Meloni has called the left-wing opposition to the proposed amendment "fake news," recalling that Law 194 provides for measures to prevent abortions, which would include counselling pregnant women about alternatives. The amendment specifically allows anti-abortion groups, or groups "supporting motherhood", to be among the volunteer groups that can work in the counselling centres.

"I think we have to guarantee a free choice," Meloni said recently. "And to guarantee a free choice you have to have all information and opportunities available. And that's what the Law 194 provides."

The new tensions over abortion in Italy come against the backdrop of developments elsewhere in Europe going somewhat in the opposite direction. France marked International Women's Day by inscribing the guaranteed right to abortion into its constitution. Last year, overwhelmingly Catholic Malta voted to ease the strictest abortion laws in EU. Polish lawmakers moved forward with proposals to lift a near-total ban on abortion enacted by the country's previous right-wing government.

AAP, BJP invoke Lord Hanuman; processions, 'chalisa' recitalas held in Delhi

NEW DELHI, APR 23: AAP leaders took out processions carrying mace with stickers of insulin vials and visited temples while BJP leaders organised special Hanuman Chalisa recitals across Delhi on Tuesday, as the two parties invoked Lord Hanuman on the festival commemorating the birth of the deity.

With Delhi Chief Minister Arvind Kejriwal receiving the first dose of insulin in Tihar Jail on Monday evening since his arrest on March 21, AAP leaders said that it happened due to the blessings of Lord Hanuman.

His wife Sunita Kejriwal offered prayers at the Hanuman Temple in Connaught Place on the occasion of Hanuman Janmotsav and said she hopes to visit again soon with her husband.

The party leaders had accused the Tihar administration of denying insulin to Kejriwal who suffers from diabetes and had claimed it was a "conspiracy" to kill the chief minister who was showing a spike in his sugar levels. Kejriwal is currently lodged in Tihar Jail in connection with a money laundering-linked excise policy case.

"May Hanuman Baba give wisdom and prosperity to all. May Hanuman Baba take away everyone's trouble and mine too. I will come back with sir (Arvind Kejriwal) soon," Sunita Kejriwal said.

Delhi Health Minister Saurabh Bharadwaj organised a 'Shobhayatra' of Lord Hanuman in his Greater Kailash constituency.

"Delhi Chief Minister Arvind Kejriwal is an immense 'Bhakt' of Hanuman ji. Today Hanuman ji has once again come to alleviate the trouble of his 'Bhakt'. On this auspicious occasion of Hanuman Jayanti, Kejriwal received insulin.

"The jail administration



was denying him insulin. This shows that whenever the devotees of Lord Hanuman are in trouble, he comes to their rescue," the senior party leader said.

The procession featured artistes dressed as Lord Ram, Sita, Lakshman, and Hanuman. During the 'shobhayatra', the person posing as Lord Hanuman was seen carrying props of insulin vials while Bharadwaj held a mace with stickers that had 'insulin' written on them. The procession commenced from the 'Prachin Shiv Mandir' of Chirag Delhi and toured areas such as Chirag Delhi and Sheikh Sarai.

Aam Aadmi Party leaders including Kejriwal have in the past also invoked Hindu gods which had led its critics to charge it with peddling "soft Hindutva".

Last week, the party launched its "AAP Ka Ram Rajya" website to showcase the party's concept of "Ram Rajya", saying Delhi Chief Minister Kejriwal tried to realise the ideals of Lord Ram in the national capital.

In 2022, Kejriwal suggested printing images of Goddess Laxmi and Lord Ganesha on currency notes to boost the economy.

Amid the Lok Sabha election campaigning, AAP candidates -- Somnath Bharti, Kuldeep Kumar,

Mahabal Mishra and Sahiram Peelwan -- too sought the blessings of the deity on Tuesday.

Delhi minister Atishi visited Hanuman temples in the Kalkaji assembly constituency and prayed for the good health of Kejriwal.

"Today I visited various Hanuman temples in Kalkaji and participated in the Bhandara and prayed to Bajrangbali to keep the popular Chief Minister of Delhi, Arvind Kejriwal, healthy.

"This holy occasion of Hanuman Jayanti has proved to be very auspicious for the people of Delhi. Due to the prayers of the people of Delhi for their brother, their son and the blessings of Bajrangbali, Kejriwal ji finally got insulin in jail today," she said in a post on X in Hindi.

Delhi BJP leaders said that they held mass recitals of 'Hanuman Chalisa' at temples and other places across 13,637 polling booths across the city. Many senior party leaders and candidates in Lok Sabha polls attended the programmes at various locations. In-charge of Delhi BJP for Lok Sabha polls OP Dhankhar attended Hanuman Chalisa paath (recital) at Dwarka while state president Virendra Sachdeva attended the event at

Prachin Hanuman temple in Connaught Place.

"We prayed for the health and happiness of the Delhi people. We also prayed that just like a Ram Bhakt Prime Minister Narendra Modi is working at the Centre, there should also be an end to corruption in Delhi and a Ram Bhakt should govern here also," Sachdeva said. State general secretary (organisation) Pawan Rana recited Hanuman Chalisa at a temple near Rouse Avenue court. New Delhi Lok Sabha candidate Bansuri Swaraj attended the programme at a park in Chirag Dilli under the constituency.

Other candidates including Ramvir Singh Bidhuri (South Delhi), Yogendra Chandolia (North West Delhi), Harsh Malhotra (East Delhi) and Kamaljeet Sehrawat (West Delhi, Praveen Khandelwal (Chandni Chowk) also attended Hanuman Chalisa recitals in their respective constituencies.

Meanwhile, the Delhi Police said that the Hanuman Jayanti processions at different parts of the national capital, including Jahangirpuri where a communal clash had broke out two years ago, were taken out peacefully amid tight security.