

DAILY PT POINTERS

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The Hindu-Health(GSII)-Page 7

PMJAY did not reduce patients' health expenses: Chhattisgarh study

Data points to 'double-billing', where hospitals claim money from insurance as well as from patients

DATA POINT

The Hindu Data Team

An analysis of the effectiveness of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY) in Chhattisgarh shows that the scheme has not increased utilisation of hospital care. Also, the scheme did not reduce the out-of-pocket expenditure (OOPE) for hospitalised patients. Moreover, the data also pointed to the possibility of “double-billing”, where the hospitals will claim money

2014 and 2019. However, the increase was similar among those who were enrolled in PFHI schemes (an increase from 3.3% to 6%) and those who were not enrolled in one (2.9% to 5.7%). This shows that the PFHI schemes, in particular the PMJAY have not led to an increase in access.

Table 1C shows the share of hospitalisations which happened in a private hospital. Notably, among those enrolled in PFHI schemes, the share of hospitalisations in private hospitals increased from around 33% to 45% between 2014 and 2019. Among those who were not enrolled, this share re-

Expense report

The tables are sourced from a study published by Samir Garg, Kirti Kumar Bebartha and Narayan Tripathi in BMC public health, a peer-reviewed open-access scientific journal



Table 2

Table 2A: The table shows the mean out-of-pocket expenditure (OOPE in ₹) for hospitalisations

PFHI scheme	Type of hospital	2004	2014	2019
All	Public	8,603	3,491	3,101
	Private	15,280	22,929	26,108
RSBY	Public	-	2,633	-
	Private	-	26,326	-
PMJAY	Public	-	-	3,078
	Private	-	-	19,375
MSBY	Public	-	-	3,506
	Private	-	-	41,154
...

- An analysis of the effectiveness of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY) in Chhattisgarh shows that the scheme has not increased utilisation of hospital care. Also, the scheme did not reduce the out-of-pocket expenditure (OOPE) for hospitalised patients. Moreover, the data also pointed to the possibility of “double-billing”, where the hospitals will claim money from the insurance provider but charge the patients illegally for the same service.
- AB-PMJAY is the world’s largest Government funded health assurance scheme.
- AB-PMJAY provides health assurance of up to Rs.5 Lakh per family per year for secondary and tertiary healthcare hospitalizations. The beneficiary families under Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) have been identified from the Socio Economic Caste Census (SECC) of 2011 on the basis of select deprivation and occupational criteria across rural and urban areas.

The Hindu-Geography(GSI)-Page 18

Catatumbo lightning: a torrent of current

Arkatapa Basu

Catatumbo lightning is a mesmerising natural phenomenon that occurs over the Catatumbo River in Venezuela, where lightning strikes almost continuously. This phenomenon primarily happens at the mouth of the Catatumbo River, where it meets Lake Maracaibo, the largest lake in Venezuela.

A convergence of several factors give rise to the unique conditions required for Catatumbo lightning. Warm, moist air from the

Caribbean Sea is pushed towards the Andes mountains, where it collides with cooler air descending from the peaks. This collision creates a perfect storm of sorts, as the warmer air is forced to rise rapidly by the shape of the local landscape. And as it does, it cools and condenses, forming towering cumulonimbus clouds.

Meanwhile, the combination of strong winds and temperature differentials generates electrical charges within these clouds. The cumulonimbus clouds — sometimes reaching heights of more than 5 km — load up on static electricity. When the electrical potential within the clouds becomes too great, it discharges in the form of lightning. Catatumbo lightning is distinguished by its frequency and duration: the strikes occur for up to 160 nights in a year, with an



A convergence of several factors give rise to the unique conditions required for Catatumbo lightning. GETTY IMAGES/ISTOCKPHOTO

average of 28 lightning strikes per minute at its peak. Thanks to this constant flow of current, the area has earned the title of “the lightning capital of the world”.



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The Hindu-Welfare Schemes(GSII)

Concerns over criteria for scholarship scheme for SCs

A.S. Jayanth
KOZHIKODE

Disbursal of post-matric scholarships for students from the Scheduled Caste (SC) category is reportedly getting delayed in Kerala in the wake of the changes introduced in its eligibility criteria.

According to functionaries of the Ambedkar Progressive Democratic Forum (APDM), the revised scholarship scheme was launched by the Union government in March 2021. The Kerala government notified the changes in January 2023.

Shaju V. Joseph, general secretary of the forum, points out that only those whose annual family in-

come is up to ₹2.5 lakh are eligible for the scholarship now. "The principle of creamy layer has been made applicable to the educational assistance for the SCs. If this is going to be rigorously applied, a vast majority of students belonging to the category aspiring for higher education will be out of the ambit of e-grants or scholarships," Mr. Joseph says.

Practical problems

Before the 2021-22 academic year, the fees for students from SC, ST, and the Other Eligible Communities were remitted by the government directly to the educational institutions. As per the latest provisions, the fees are directly



When the Government of Kerala fails to remit its share on time, the remittance of the Centre will get delayed.

SHAJU V. JOSEPH
General secretary, APDM

paid to the student's bank account. The student should withdraw the fee and remit it to the respective educational institution. The academic allowances (lump sum grant, monthly stipend or monthly pocket money) also reach the bank account. Mr. Joseph says that though this arrangement appears

to be simple, the students are facing practical problems in its implementation.

Another feature of the scheme is the cost-sharing between the Union and the State governments in the proportion of 60:40. "But the catch is that only after the Government of Kerala remits its share to the bank accounts of the students, the Union government makes its remittance. When the Government of Kerala fails, which happens always, to remit the full amount of its share on time, the remittance of the Union government will get delayed," Mr. Joseph says. Those who do not receive the scholarship are not able to pay their fees on

time. They are prevented from appearing in exams. Such students drop out, Mr. Joseph says.

Met by State govt.

Activists point out that those belonging to the SC category have been able to make some modest progress in their social life only because of their educational achievements. These new provisions could arrest those too, they say. "The entire educational assistance to the SC students hailing from families with annual income of over ₹2.5 lakh is met by the State government out of its funds. The State is not getting matching grant from the Union government for this," Mr. Joseph says.

- The Post Matric Scholarship Scheme for SC Students (PMS-SC) is a Centrally Sponsored Scheme for the SC students for studies in India only whose Parent/Guardian's income should not exceed Rs. 2.5 lakh per annum.
- The objective of the scheme is to provide financial assistance to the Scheduled Castes students and to appreciably increase the Gross Enrolment Ratio of SC students in higher education with a focus on those from the poorest households. .

Indian Express-Economy(GSIII)-Page 1

I-T clause to ensure MSMEs are paid on time creates hurdle

Large companies shift to unregistered MSMEs as tax liability piles up

AANCHAL MAGAZINE
NEW DELHI, MAY 5

A NEW PROVISION in the Income-Tax Act in Budget 2023-24 that aimed to secure payments to micro, small and medium enterprises (MSMEs) within 45 days of supply of goods or services has resulted in a peculiar problem — that of large companies canceling orders to registered MSMEs and placing these with unregistered MSMEs.

While some MSME associations have approached the Supreme Court against the new norm, the Union MSME Ministry is learnt to have reached out to industry players for solutions. It has asked stakeholders to suggest ways to resolve the issues arising from the I-T Act and to recommend possible alternate mechanisms for timely clear-

EXPLAINED

E Hiccups in shift to new credit cycle

THE NEW clause aimed to secure MSME bills are paid by business houses within 45 days against the prevailing business cycle of 90-120 days. This is ironically hurting some MSMEs with firms shifting business to unregistered micro and small units. The Ministry has now sought suggestions to resolve this.

ance of MSME bills.

This is the second time the Ministry is reaching out to MSMEs. A fortnight after

CONTINUED ON PAGE 2

- The Finance Act 2023 introduced an amendment to the Income Tax Act by adding clause (h) to Section 43B. This clause stipulates that any payments owed to MSMEs, not resolved within 45 days, will not qualify for tax deductions until the payment is made.
- The aim is to motivate larger entities to prioritise their settlements with MSME counterparts, thereby promoting a more robust economic environment for these smaller businesses.
- Section 43B(h) is applicable to transactions that involve the purchase of goods or services from enterprises registered under the MSMED Act, 2006.
- Section 43B(h) of the Income Tax Act, introduced in 2023, aims to ensure timely payments to Micro, Small and Medium Enterprises (MSMEs). Here's a breakdown of what it means for you:

Indian Express-Environment (GSIII)-Page 12

FOREST DEPT AWAITS MINISTRY NOD TO TRANQUILISE TADoba-ANDHARI TIGERS THAT WILL BE MOVED

Maharashtra gears up for tiger translocation to Sahyadri reserve in bid to revive numbers

NIKHIL GHANEKAR
NEW DELHI, MAY 5

THE MAHARASHTRA forest department is gearing up for translocation of a few tigers from the Tadoba-Andhari Tiger Reserve (TATR) in Chandrapur to Sahyadri, the lone tiger reserve in the state's western region.

The Sahyadri Tiger Reserve (STR) is one of only five tiger reserves in the country — Kaval in Telangana, Kamlang in Arunachal Pradesh, Dampa in Mizoram and Satkosia in Odisha being the other four — with zero tigers within the reserve and the translocation is part of a long-term plan to revive the population of the big cats in the northern Western Ghats forests.

STR straddles Kolhapur, Satara, Sangli and Ratnagiri districts in western Maharashtra. Spread over 1,165 sq km, the re-



A tiger caught on a camera trap inside the reserve in 2018. file

serve was notified in 2010 by amalgamating the Chandoli national park and Koyna wildlife sanctuary. The Maharashtra forest department is awaiting the final go-ahead from the Union Environment Ministry to tranquilise the tigers in TATR for the translocation process, senior officials said.

The National Tiger

Conservation Authority (NTCA) had cleared the translocation plan in October 2023. In the initial phase, a male tiger or a pair of male and female tigers would be translocated from TATR to STR.

"Once we have the permission to tranquilise the tigers under Section 12 of the Wildlife Protection Act, we will go ahead with the field work. We have cre-

ated a special vehicle to transport the big cats," said Maheep Gupta, Principal Chief Conservator of Forests (Wildlife), Maharashtra forest department.

The translocation project is an important step in conservation of tigers in the forests of the northern Western Ghats, which form a key wildlife corridor between Maharashtra and Karnataka.

This corridor allows connectivity of tiger population in Sahyadri reserve, Radhanagari wildlife sanctuary, Amboli reserve forest, Mhadei wildlife

sanctuary in Goa and Bhimgad wildlife sanctuary and Kali Tiger reserve in Karnataka, according to the government's All India Tiger Estimation report, 2023.

During the 2022 population estimation exercise in Sahyadri, no evidence of tiger was captured on camera traps. However, in December last year a camera trap captured a tiger within the

reserve limits. The 2023 tiger population estimation report highlighted the threats posed to the wildlife corridor between the STR and Karnataka's forests from mining activities, road projects and human settlements.

The translocation of tigers from TATR will be followed by their translocation from the Pench Tiger Reserve landscape, which is spread over Maharashtra and Madhya Pradesh. In all, the plan involves translocation of eight tigers — three males and five females.

The translocation is part of the phase-II of the tiger recovery project. "There will be a soft release, which involves keeping the tiger in an enclosure, and it would be monitored closely before releasing it in the tiger reserve's habitat," said K Ramesh, senior scientist, Wildlife Institute of India, who is providing technical support to the state.

- The Sahyadri Tiger Reserve is located in the Sahyadri Ranges of Western Ghats in Maharashtra.
- These ranges form a common boundary between Maharashtra, Karnataka and Goa, and comprise of rich evergreen, semi-evergreen and moist deciduous forests.
- It is the first Tiger Reserve of Western Maharashtra and the fourth Tiger Reserve of the State spreading over two Protected Areas of Koyana Sanctuary (KWLS) and Chandoli National Park (CNP).

Indian Express-S&T(GSIII)-Page 13

What is artificial general intelligence & why are people worried about it?

BIJIN JOSE
NEW DELHI, MAY 5

IN A recent interview, OpenAI CEO Sam Altman expressed his commitment to invest billions of dollars towards the development of artificial general intelligence (AGI). Despite Altman's repeated endorsement of AGI, many in the global tech community are apprehensive about it.

What is artificial general intelligence?

AGI refers to a machine or software that can emulate human cognitive abilities, such that it can perform any task that a human can do. This includes reasoning, common sense, abstract thinking, background knowledge, differentiating between cause and effect, etc.

Humans learn through their experiences – by talking to people or observing things;

by reading books, watching television, and reading articles – which then shape our decision-making (often subconsciously) to solve any given problem, or come up with a new one. AGI seeks to replicate this. Think of a super intelligent robot friend, who can understand everything that you say, learn new things just the way you do, and even think of problems to find solutions.

How is AGI different from the AI in use?

The main difference between AGI and the more common form of AI, also known as "narrow AI", lies in their scope and capabilities. Narrow AI performs specific tasks such as image recognition, translation, or playing games like chess – at which it can outdo humans – but it remains limited to its set parameters. AGI on the other hand, envisions a broader, more generalised form of intelligence that is not confined to any particular

task. This makes it more human-like.

This is also why AGI is currently the summit of AI development, which has always been about broadening capabilities. ChatGPT, launched in November 2022, piqued global interest due to its ability to come up with human-like text responses. Since then, as billions of dollars have been pumped in to fuel research in the field, AI models have become progressively better. The creation of AGI is like the final frontier in this development.

How old is AGI as an idea?

The idea of AGI first emerged in 1950 in a paper by Alan Turing, the father of theoretical computer science and AI. In *Computing Machinery and Intelligence*, he introduced the so-called Turing test – if a machine can engage in a conversation with a human

without being detected as a machine, according to the Turing test, it has demonstrated human intelligence.

When Turing wrote this paper, AI was a distant dream – even computers were in their nascentcy. Yet, his work led to wide-ranging discussions about the possibility of such machines, their potential benefits, and risks.

EXPLAINED AI

How can AGI help us?

In theory, AGI has innumerable benefits. For instance, in healthcare, it can re-define diagnostics, treatment planning, and personalised medicine by integrating and analysing vast datasets, far beyond the capabilities of humans. In finance and business, AGI could automate various processes and enhance overall decision-making, offering real-time analytics and market predictions with accuracy. AGI

could also transform adaptive learning systems that work towards the unique needs of students, democratising access to personalised education worldwide.

In an interview given to *The Wall Street Journal*, Altman said AGI would lead to a "lot of productivity and economic value", and would have unprecedented "problem-solving capabilities and creative expression".

So why is there scepticism about AGI?

Despite its promise, AGI continues to fuel widespread apprehensions. The amount of computational power required to develop AGI systems raises concerns about its environmental impacts, in terms of energy consumption and generation of e-waste.

AGI could lead to massive job losses and widespread socio-economic disparity. Power would be concentrated in the hands

of those who control AGI.

It could introduce new security vulnerabilities, and outrun governments' abilities to come up with suitable regulations.

If humans were to become dependent on AGI, it might in theory even lead to the loss of basic human skills and capabilities.

AGI can outdo human beings, making its actions difficult to understand and predict. This could conceivably lead to a sci-fi horror: AGI taking actions against human well-being.

AI pioneers Yoshua Bengio, Geoffrey Hinton, and Yann LeCun have often warned about the catastrophic outcomes of creating AGI, with Hinton even comparing AGI's dangers to that posed by nuclear weapons.

Today, most experts advocate stringent regulations to ensure that the development of AGI is in line with human values and safety standards.

What is AGI?

AGI refers to a machine or a software that can **perform any intellectual task that a human can do**. This includes reasoning, common sense, abstract thinking, background knowledge, transfer learning, ability to differentiate between cause and effect, etc.

In simple words, AGI aims to emulate human cognitive abilities such that it allows it to do unfamiliar tasks, learn from new experiences, and apply its knowledge in new ways.

AGI has innumerable positive implications. For instance, in healthcare, it can redefine diagnostics, treatment planning, and personalised medicine by integrating and analysing vast datasets, far beyond the capabilities of humans.

In finance and business, AGI could automate various processes and enhance the overall decision-making, offering real-time analytics and market predictions with accuracy.