Hepatitis-B transmission

Screening pregnant women prevents Hepatitis-B transmission: Rohtak PGIMS study

Screening pregnant women prevents Hepatitis-B transmission: Rohtak PGIMS study
Photo for representational purpose only. (The Tribune: 20220504)


Research done by doctors of Rohtak PGIMS has shown that the screening of pregnant women and administration of anti-viral drugs to Hepatitis B-positive pregnant women and their newborn children can completely prevent the transmission of Hepatitis-B.

The research has been conducted by the Department of Medical Gastroenterology at Rohtak PGIMS in collaboration with the Departments of Obstetrics & Gynaecology and Microbiology at the PGIMS.

Breastfeeding helpful

The practice of breastfeeding the newborn should be continued by the Hepatitis B-positive mothers. Moreover, there is no indication of performing elective caesarean section solely for decreasing vertical transmission of Hepatitis-B. Dr Parveen Malhotra, head, dept of medical gastroenterology, PGIMS

“As many as 400 pregnant patients were found Hepatitis B-positive during their screening. Of them, 50 patients with high viral load and/or HbeAg positivity were put on anti-viral treatment from the 28th week of pregnancy. Every newborn was administered 0.5 ml hepatitis B immunoglobulin along with zero dose hepatitis B vaccination within 24 hours of birth, followed by complete course of Hepatitis-B vaccination,” said Dr Parveen Malhotra, senior professor and head, department of medical gastroenterology at PGIMS.
As per the guidelines, vertical transmission is confirmed if a child of a Hepatitis B-positive mother is detected to be HbsAg or HBV DNA positive at one year of age.

“Till date, as many as 100 newborns have attained one year of age, and all of them have been found to be HbsAg negative, indicating zero per cent vertical transmission,” said Dr Malhotra.

Significantly, all newborns were breastfed. There were no detrimental effects of Hepatitis-B virus or anti-viral treatment on the pregnant women as well as the newborns.

Most pregnant patients belonged to rural areas, were in the age-group of 20-30 years and predominantly delivered at government hospitals.

“The initial results of this research are very encouraging and underline the need of taking the aforesaid steps in all Hepatitis B-positive pregnant patients for preventing vertical transmission so as to decrease the total burden of this deadly disease,” said Dr Malhotra, who is also the in charge of the Model Treatment Centre at the PGIMS.

The research also reaffirms that the practice of breastfeeding the newborn should be continued by the Hepatitis B-positive mothers.

“Moreover, there is no indication of performing elective caesarean section solely for decreasing vertical transmission of Hepatitis-B,” the doctor added.

**Generic cancer drug**

**Aurobindo Pharma gets USFDA nod for generic cancer drug Bortezomib**

Bortezomib for injection is indicated for treatment of adult patients with cancer of plasma cells and cancer of lymph nodes (The Tribune: 20220504)


Aurobindo Pharma on Tuesday said its wholly-owned arm Eugia Pharma Specialties Limited has received final approval from the US health regulator to manufacture and market its generic version of Bortezomib for injection used to treat certain types of cancer.

The approval by the US Food and Drug Administration (USFDA) is for single-dose vial of Bortezomib for injection of strength 3.5 miligram per vial, Aurobindo Pharma said in a regulatory filing.

The product being launched immediately is the generic version of reference listed drug Velcade of Takeda Pharmaceuticals USA Inc.
Bortezomib for injection is indicated for the treatment of adult patients with multiple myeloma (cancer of plasma cells) and is also used to treat adult patients with mantle cell lymphoma (cancer of lymph nodes), the company said.

The approved product has a market size of USD 1.172 billion for the 12 months ended March 2022, the company said citing IQVIA data.

**Molecule**

**IIT-Mandi team discovers molecule that can be used for treatment of diabetes**

Diabetes is associated with insufficient insulin release by beta cells of pancreas in response to blood glucose levels (The Tribune: 20220504)


Researchers at the Indian Institute of Technology (IIT) in Mandi have identified a drug molecule which triggers the release of insulin by pancreas and can potentially be used as an orally administered medicine for diabetes.

According to the research team, the molecule is called PK2 and the findings of the research have been published in the Journal of Biological Chemistry.

“Current drugs such as exenatide and liraglutide used for diabetes are administered as injections, and they are costly and unstable after administration. We seek to find simpler drugs that are stable, cheap, and effective against both Type 1 and Type 2 diabetes,” said Prosenjit Mondal, Associate Professor, School of Basic Sciences at the IIT.

Diabetes is associated with insufficient insulin release by beta cells of pancreas in response to blood glucose levels.

The release of insulin entails many intricate biochemical processes. One such process involves protein structures called GLP1R present in the cells. A hormonal molecule called GLP1, released after the ingestion of a meal, binds to the GLP1R and triggers the release of insulin.

Drugs such as exenatide and liraglutide mimic GLP1 and bind to GLP1R to trigger insulin release.

“To find alternatives to these drugs, the multi-institutional team first used computer simulation methods to screen various small molecules that can bind with GLP1R. While PK2, PK3, and
PK4 had good binding abilities with GLP1R, they subsequently chose PK2 because of its better solubility in solvents. The researchers then synthesized PK2 in the lab for further testing,” said Khyati Girdhar, a research scholar.

“We first tested the binding of PK2 on GLP1R proteins in human cells and found that it is able to bind well to GLP1R proteins. This showed that PK2 can potentially trigger insulin release by the beta cells,” she added.

The researchers found that PK2 was rapidly absorbed by the gastrointestinal tract, which means that it can be used as an oral medication rather than an injection.

Furthermore, after two hours of administration, PK2 was found distributed in the liver, kidney, and pancreas of the mice, but there were no traces of it in the heart, lungs, and spleen. There was a small amount present in the brain, which shows that the molecule may be able to cross the blood-brain barrier. It was cleared from circulation in about 10 hours.

Pointing out another critical finding in their work, Mondal said, “Beyond increasing insulin release, PK2 was also able to prevent and even reverse beta cell loss, a cell essential for insulin production, making it effective for both Type 1 and Type 2 diabetes.”

“In order to test the biological effects of PK2, the researchers administered it orally to experimental mice developing diabetes and measured glucose levels and insulin secretion. There was a six-fold increase in serum insulin levels in PK2-treated mice over the control group. These findings provide hope for inexpensive oral drugs for diabetic patients,” he said.

**Abortion rights**

**Draft shows US top court may alter abortion rights (Hindustan Times:20220504)**

https://epaper.hindustantimes.com/Home/ShareArticle?OrgId=456137d7d2&imageview=0

Declaring that the right to abortion is “not deeply rooted in the nation’s history and traditions”, the United States Supreme Court (SC) is set to strike down the legal protections for abortions available since the historic Roe v Wade verdict of 1973, according to a leaked draft of the majority opinion reported by the news site, Politico.

The draft majority opinion, in response to a case on a restrictive Mississippi law that banned abortion after 15 weeks, was written by Justice Samuel A Alito Jr and reportedly backed by four other conservative judges, all nominated by Republicans, while three Democratic administration-nominated judges — Stephen Breyer, Sonia Sotomayor and Elena Kagan — are expected to dissent from the opinion.

Even as the SC confirmed the authenticity of the document, the leak prompted a strong response from President Joe Biden, who warned against overturning Roe v Wade and defended the woman’s right to choose.
“I believe that a woman’s right to choose is fundamental, Roe has been the law of the land for almost fifty years, and basic fairness and the stability of our law demand that it not be overturned,” Biden’s statement said. P2, 13\n
Decoding the abortion tussle

Decoding the abortion tussle as Roe v Wade likely to be overturned
(Hindustan Times:20220504)

https://epaper.hindustantimes.com/Home/ShareArticle?OrgId=450d34de15&imageview=0

As Politico, a news site, accessed the draft majority opinion of the US Supreme Court on abortion, a huge political and legal controversy broke out in the country over the roll back of protections related to abortion that have held steady for close to five decades in the country.

To be sure, there is no formal verdict yet and the draft majority opinion is subject to changes but most observers believe that given the current composition of the court — there are five conservative-leaning judges, a Chief Justice closer to the conservative end of the spectrum and three liberal-leaning judges — a roll back of abortion rights in some form is likely.

Here is an explainer on the existing legal framework, the thrust of leaked majority opinion, and its significance for American politics and legal jurisprudence.

What is the current legal framework on abortions in the US?

In 1973, the US Supreme Court — with a 7-2 verdict — declared abortion to be a fundamental right, and located it within the right to privacy, in the historic Roe v Wade case that has come to define American jurisprudence for five decades.

The case involved a legal challenge by a single pregnant mother (her legal pseudonym was Jane Roe) against Texas’s abortion laws (the case was filed against Henry Wade, the local district attorney). The court turned to the 14th amendment to the US Constitution, which held, “No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws”, and located a woman’s right to abort within the right to privacy.

The court advocated the right on the grounds that having unwanted children may force upon the woman “a distressful life and future”, cause psychological harm; tax her physical and mental health, among other factors.

At the same time, the court held this was not an absolute right and sought to balance it with the right to maternal health and foetal life. To do so, it devised a threefold framework. During the
first trimester of the pregnancy, states could not impose any restriction on abortions; in the second trimester, it allowed states to impose narrow restrictions but only to protect the mother’s health; and in the third trimester — which the court saw as the stage when the foetus became viable — the court allowed for legal prohibition of abortions.

In a subsequent case, Planned Parenthood v Casey, in 1992, the court upheld the essence of the Roe v Wade verdict.

A plurality of opinion said that the essence of the 1973 decision was that women could abort before foetal viability without undue state interference, the state could impose restrictions post viability but while making exceptions for the woman’s health, and the state had legitimate interest in protecting the mother’s life and foetal life.

But in this 1992 case, the court abandoned the trimester framework and prioritised the idea of foetal viability, declaring that medical advances had shown that viability kicked in around 23-24 weeks rather than 28 weeks as upheld by Roe v Wade.

This opened the door for states to begin imposing restrictions to safeguard foetal life, prior to the end of the second trimester, and has been the dominant legislative framework so far.

Why is abortion up for hearing and what is the draft majority opinion?

Abortion has remained one of the most contentious and divisive issues in American politics, with Republicans and the Christian Right seeing it as an assault on the right to life, while Democrats, liberals, and women and human rights groups seeing it as a fundamental human right inexorably linked to the right to choose. In recent years, as polarisation has deepened, a range of Republican-dominated states have brought in restrictive legislations which limit the right to abort.

A Mississippi legislation banning abortion beyond 15 weeks was challenged and heard in the Supreme Court at the end of last year.

It was in response to this case that a majority of the bench, according to Politico, backed a draft opinion penned by justice Samuel A. Alito Jr., justices Clarence Thomas, Neil M Gorsuch, Bret M Kavanaugh and Amy Coney Barrett — all nominated by Republican administrations — backed the majority opinion, while the three Democratic administration-nominated judges — justices Stephen Breyer, Sonia Sotomayor and Elena Kagan — are expected to dissent from the opinion.

The views of Chief Justice John Roberts, a Republican nominee who has adopted a more centrist position than his other conservative colleagues in the past, were not clear.

In his draft opinion, justice Alito has said that Constitution makes no reference to abortion, and, therefore, no such right is implicitly protected by any constitutional provision. “Roe was egregiously wrong from the start. Its reasoning was exceptionally weak, and the decision has had damaging consequences. And far from bringing about a national settlement of the abortion issue, Roe and Casey have enflamed debate and deepened division. It is time to heed the Constitution and return the issue of abortion to the people’s elected representatives.” The judge claims that Roe v Wade imposed “the same highly restrictive regime” on the entire nation, and
effectively struck down the abortion laws of every single state, terming it as “the exercise of raw judicial power”.

The right to abortion, in justice Alito’s view, “is not deeply rooted in the nation’s history and traditions”.

“On the contrary, an unbroken tradition of prohibiting abortion on pain of criminal punishment persisted from the earliest days of the common law until 1973.”

If the draft majority opinion is upheld, it will not result in a nationwide ban on abortion. But it is expected to embolden conservatives to make an electoral pitch for nationwide restrictions.

For now, what the majority opinion will do is allow states to impose their own restrictions — and these will almost certainly, in Republican states, be more restrictive than what was laid out in Roe v Wade and Casey.

What is the political and legal significance of such a verdict?

The immediate impact of such a verdict — expected to be delivered this summer — is it will galvanise both sides of the political divide in the US. Republicans will see it as a victory, pass laws in state legislatures where they are dominant, tap into the passions of their base to call for a national ban, and consolidate their supporters in midterm elections scheduled for November this year.

For the Democrats, the verdict will become a key rallying cry in association with civil society, women’s groups and human rights organisations. The party will use the verdict to mobilise its voters to turn up and promise to protect abortion related rights in states and legislatures where Democrats are dominant.

The verdict is also expected to lead to a Balkanised legal terrain in the US — with Republican states imposing harsher restrictions and Democratic states opening doors for out of state residents who may wish to exercise their right. This geographical cleavage, already manifest in the electoral college, will deepen the fault lines in American politics.

And finally, the verdict will once again throw a spotlight on the role and composition of the US Supreme Court.

In a system where judicial nominees are picked by the party in power and then confirmed by the Senate, the court’s decisions are seen as almost entirely dictated on partisan lines.

With a Republican-leaning majority on bench, the court faces a crisis of credibility where critics see it as an instrument of advancing the political agenda of the Right by turning to a conservative interpretation of the Constitution.
Contraception

Important things to know about contraception failure
Contraceptives prevent pregnancy, and the most popular forms are condoms, birth control pills, intrauterine devices, emergency contraception pills and contraceptive implants (The Indian Express :20220504)


contraception failure, what causes contraception failure, contraceptives, contraceptive pills, unwanted pregnancy, things to know about contraceptives, what is contraception failure, indian express newsWhen choosing your choice of birth control, factors you should include are your health, how sexually active you are, how many people you are sexually involved with. (Photo: Getty/Thinkstock)

There is a lot of misconception surrounding contraception, about which method is the most effective, the options available for both men and women, etc.
Contraceptives, essentially, prevent pregnancy, and the most popular forms are condoms, birth control pills, intrauterine devices, emergency contraception pills (morning after pill) and contraceptive implants.

ALSO READ | Amrita Rao, RJ Anmol talk about pregnancy struggles and losing a baby via surrogacy

According to Dr Suhasini Inamdar, consultant — obstetrician and gynaecologist, Motherhood Hospitals, Indiranagar, Bangalore, no contraception method is 100 per cent effective. “Some methods claim that they are 98 per cent effective, which means that at least 2 out of 100 couples will get pregnant. However, this figure is only accurate if used precisely according to the doctor’s instructions,” she says.

The doctor blames it on “human error”. “There is a lack of awareness about the importance of birth control; some people still choose not to use it or forget to use it. If you find yourself forgetting to take your birth control pill more than once, it is recommended that you get an IUD or implant.”

Additionally, Dr Inamdar, says, even if people use contraceptives, they fail to use them properly. “Most people prefer to use condoms as they are easily accessible. However, knowing which condom is the right size for you and being careful while removing it is just as important.”

Apart from that, medications like antibiotics, antidepressants, natural herbs, and diabetes drugs can also interfere and make birth control pills less effective, she says.

Best contraceptive method

Is there any such thing as the ‘best contraceptive method’? No, because “everyone’s body is different”. “So, you should try to figure out which method of birth control works for you. When choosing your choice of birth control, factors you should include are your health, how sexually active you are, how many people you are sexually involved with, and whether you want to conceive in the future. Although IUDs are highly effective at preventing unintended pregnancy, it does not protect against STDs and HIV,” the doctor explains.

World Asthma Day 2022

World Asthma Day 2022: Know about common triggers and ways to control them

"Asthma is a condition characterized by inflammation and narrowing of respiratory tubes, which results in cough, difficulty in breathing, chest tightness. It is one of the causes of chronic cough," Dr Suhas HS, consultant pulmonologist, Manipal Hospital, said(The Indian Express :20220504)
To prevent asthma, it's crucial to understand some of the most common triggers of the disorder. (Source: Getty Images/Thinkstock)

Asthma, a condition in which a person’s airways become inflamed, narrow, and swell, and may produce extra mucus, is marked by breathing difficulties and incessant coughing. To raise awareness about the same and improve the lives of people with asthma, World Asthma Day is observed on the first Tuesday in May, every year.

This year, it is being observed with the theme ‘Closing Gaps in Asthma Care’ to highlight “the number of gaps in asthma care which require intervention in order to reduce preventable suffering as well as the costs incurred by treating uncontrolled asthma,” according to Global Initiative for Asthma, (GINA).

ALSO READ | World Asthma Day 2022: Expert shares how Ayurveda can help manage breathing difficulties

To prevent asthma, it’s crucial to understand some of the most common triggers of the disorder. “Asthma is a condition characterized by inflammation and narrowing of respiratory tubes, which results in cough, difficulty in breathing, chest tightness, wheeze. It is one of the causes of chronic cough,” Dr Suhas HS, consultant pulmonologist, Manipal Hospital, said.

According to the expert, the common triggers include tobacco smoke, dust, pollens, pets, mold, outdoor and air pollution, pest (cockroaches), disinfectant agents, food and food additives, exercise, infections, changes in weather, and medications.

Fatty liver disease in children

All you need to know about fatty liver disease in children

"Fatty liver disease occurs when there’s too much fat accumulates in the liver," Dr Shailesh Sable, consultant, liver transplant and HPB surgeon(The Indian Express: 20220504)

Non-alcoholic fatty liver disease (NAFLD) is a highly prevalent liver disease that affects 34 per cent of children with obesity, according to a study published on pubmed.gov. Medical News Today stated that NAFLD is the most common liver disease among children in the United
States, and the number seems to be rising worldwide. Besides liver-related morbidity, NAFLD also increases the risk of cardiometabolic diseases in adulthood.

“Fatty liver disease occurs when there’s too much fat accumulates in the liver,” Dr Shailesh Sable, consultant, liver transplant and HPB surgeon, Apollo Hospitals, Navi Mumbai, told indianexpress.com. He further added: “Fat triggers inflammation (leading to injury of liver or hepatocytes) and results into healing by fibrosis (scarring) and ultimately end-stage liver disease called cirrhosis.”

The doctor also noted that childhood obesity is rising over the last two decades and is directly related to the simultaneous rise in paediatric fatty liver disease. “Parents are unaware that obesity has a direct relationship with diabetes (type 2) and metabolic syndrome which is also a perfect recipe for fatty liver disease. The main reason behind this is a sedentary lifestyle and unhealthy eating habits (fast food or preserved foods). However, not all fatty liver diseases are related to obesity, there are also some genetic mutations which can lead to fatty liver (mainly related to cholesterol homeostasis).”

NAFLD is a silent disease, which means it is generally a symptomless condition. But, Dr Sable shared that as the disease progresses to fibrosis and/or cirrhosis stage it can interfere with critical functions of the liver. In the early stage, symptoms could be easy fatigue or feeling of tiredness, or subtle discomfort in the right upper abdomen. Stage of cirrhosis may present with jaundice, fluid in the tummy or swelling over the legs, disorientation or excessive daytime sleepiness, etc.

Are diet and exercise the sole solutions?

Dr Sable said that even though eating a balanced diet, limiting sugars and salt, consuming lots of green leafy vegetables and fresh fruits along with regular exercise does reduce weight, thereby reducing fatty liver, not all fatty livers are associated with obesity alone; lowering cholesterol with the help of medications are sometimes indicated under specialist medical supervision. “There is no medication approved for fatty liver disease, some studies indicate the role of vitamin E and anti-diabetic drugs but remain experimental. Till then balanced diet and regular exercise remain the gold standard therapy,” he said.

Screening for fatty liver is a controversial topic at this moment, partly because there’s no treatment other than weight loss and non-availability of perfect screening tool. Dr Sable said that “ultrasonography (USG) of liver (prone to inter-observer variation) and liver function test (AST/ALT) to check inflammation in liver are the commonly used modalities by most clinicians.” Rarely, MRI of the liver can be used to grade the fat in the liver. However, the requirement of sedation in smaller kids, high cost and claustrophobia limits its utility, he added.
Over 90% of asthma patients -- right medication

Over 90% of asthma patients in India do not receive the right medication
The country has an estimated 34.3 million asthmatics, that is 12.9% of the global 262 million cases. (The Indian Express: 20220504)


Every year, 4.61 lakh people die due to asthma in the world, and India contributes to 1.98 lakh deaths.
INDIA CONTRIBUTES to 42 percent of global asthma deaths, according to a report published online in Lung India journal related to respiratory medicines on Tuesday. While inhaled corticosteroids (ICS) is a standard treatment, authors of the study have said that the main reason for the rise in deaths is that 90 percent of asthmatics do not get the right medication.

The country has an estimated 34.3 million asthmatics, that is 12.9% of the global 262 million cases. Every year, 4.61 lakh people die due to asthma in the world, and India contributes to 1.98 lakh deaths. This is indeed very worrying, and it was important to identify the cause for this, Dr Sundeep Salvi, Director of Pulmocare Research and Education (PURE) Foundation and the lead author of the study, told The Indian Express.

“We conducted an in-depth analysis earlier this year after obtaining the sales of inhaled corticosteroids (ICS) in India from the IQVIA (Intercontinental Marketing Services and Quintiles), an authentic source of drug sales in the country. This was compared with the expected sales of inhaled corticosteroids. For the 34.3 million asthmatics in India, the total sales of inhaled corticosteroids should be 384 million units, but the actual sales in 2020-21 were only 26.4 million units. This means that more than 90% of asthmatics in India do not receive the right asthma medication, Dr Salvi pointed out.

According to the latest data from the Global Burden of Diseases (GBD) study in 2019, states of Uttar Pradesh, Bihar, Odisha are among the top three with the highest number of asthmatics. However, the number of ICS units sold here were clearly inadequate for the number of patients with the disease. For instance, the number of asthmatics in Uttar Pradesh is 40.83 lakh. While the expected sales of ICS should have been 49 million units according to the study, only four million units were sold. Similarly, Bihar has 31.42 asthmatics and the expected sale of ICS is around 37.7 million units. According to the study, the sale was only 1.9 million units.

Inhaled corticosteroids (ICS) are the mainstay of asthma treatment in the world. They reduce the underlying inflammation in the airways, which is the characteristic feature of asthma, and reduce the airway swelling, spasm and mucus hypersecretion. ICS use has been shown to reduce asthma deaths and suffering in the western world. The number of asthma deaths in the world are actually declining, but in India asthma deaths have increased significantly over the
past three decades, most likely due to underuse of ICS, and overuse of the inhaled bronchodilator drugs, Dr Salvi said.

In most cases, doctors treating asthma patients do not prescribe ICS. When prescribed, many patients do not take it because of myths, misbeliefs and fears associated with ICS. Among those who take ICS, they do so on an irregular basis. Also, most public hospitals do not have ICS in their formulary. Therefore, doctors cannot or do not prescribe ICS for asthmatics. Most medical college hospitals do not have ICS in their pharmacy and according to Dr Salvi, undergraduate and postgraduate students do not learn to prescribe the right medications for the asthma patients.

It is inhaled bronchodilators which give immediate relief that are the most widely used inhaled medications for asthma. However, they do not reduce the underlying inflammation and therefore make the disease more chronic. May 3 is recognized as the world asthma day to create awareness about this important disease that causes immense suffering and death. All asthmatics must receive inhaled corticosteroids as a standard treatment. This not only reduces the risk of dying, but also improves quality of life and reduces suffering, Dr Salvi added.

The above article is for information purposes only and is not intended to be a substitute for professional medical advice. Always seek the guidance of your doctor or other qualified health professional for any questions you may have regarding your health or a medical condition.

Forcible vaccination

Weighing the evidence: On SC’s order against forcible vaccination (The Hindu:20220504)

https://www.thehindu.com/opinion/editorial/weighing-the-evidence/article65378653.ece

Emerging evidence, not precedents, must govern India’s policy on vaccination
The Supreme Court in a decisive order has laid out a fine balance between individual liberty and the state’s right to impose restrictions in the interests of public safety. An individual had the right to refuse vaccination and though the Government could “impose limitations” on rights of individuals, it had to be “reasonable and proportionate” to the extent that it achieved the objective, in this case, containing the spread of the coronavirus. The current evidence, the Court reasoned, suggested that unvaccinated individuals were no more likely to spread the virus than those vaccinated and, therefore, people could not be denied access to public places, services and resources for being unvaccinated. However, this was no blanket order, and if infection rates increased and vaccines demonstrably reduced susceptibility to infections, the Government was within its rights to impose restrictions. The order underscores scientific reasoning and that the pandemic also continues to pose tough, science conundrums that generate new knowledge and challenge received wisdom. Last year, this time, India was besieged by the second pandemic and also woefully short of vaccines. The central policy then was to rationalise access to vaccines because demand outstripped supply. While availability was a key factor, it was also
because scientific evidence showed vaccination stemmed progression to severe disease and the priority was to save lives.

Close to 75% of Indians have had at least one vaccine shot and a good proportion have hybrid immunity. Newer, highly transmissible variants and the West’s experience, of infections being rife despite triple-shots, have all depressed demand for boosters in India. While last year, before the second wave, vaccine hesitancy was ascribed to the low uptake, it is quite likely now that people are exercising their option of waiting for more kinds of the vaccine. The current attitude is foregrounded in the ground reality that daily infections are low despite a complete opening up of normal life. In the first year of the pandemic, when vaccines were in a nascent stage and the virus was raging, the scientific wisdom was that lock-downs and vaccination of two thirds of the population would end the pandemic — an idea that has not come to pass. Thus, it could very well be that newer kinds of vaccines (proven to curb transmission), may change the understanding of the best possible means to contain the blight. The suppression of individual liberty for the greater good is perhaps among the oldest and toughest questions that democracies grapple with; and beyond the orders, it is judicial reasoning that influences policy and future discourse when the facts on the ground change. The authorities must keep scientific evidence at the forefront when they take decisions that affect individual choice.

**India's COVID-19 positivity rate**

**India's COVID-19 positivity rate past 1% again after two months(The Hindu:20220504)**


The number of active cases rose by 408 in a 24-hour span to reach 19,500
India's Covid case positivity rate went past one per cent again after over two months as the country witnessed a single-day rise of 3,157 infections and 26 fatalities, according to the Union Health Ministry data updated on Monday.

The rise reported on Monday pushed the country's overall COVID-19 tally to 4,30,82,345 cases and 5,23,869 deaths, the data said.

**Child Birth Ratec (Dainik Bhasker :20220504)**

https://epaper.bhaskar.com/detail/1285120/81309109643/mpcg/04052022/194/image/
2020 के दौरान कुल 2.42 करोड़ बच्चे पैदा हुए और 81.1 लाख लोगों की मौत हुई।

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2020 में नशीली में कोई नवजात नहीं मानी गई।

<table>
<thead>
<tr>
<th>जन्म में भी पूर्वरुप आबादी</th>
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31 साल में ऐसे बढ़ा है...जन्म-मृत्यु रिजिस्ट्रेशन

1989 में 31 लाख जीते का रिजिस्ट्रेशन हुआ था, जो 2020 में 81 लाख तक पहुंच गया। धीरे-धीरे, 1989 में ही 1:10 करोड़ जन का रिजिस्ट्रेशन हुआ था, जो 2020 में 2.42 करोड़ तक ले गया।