

UPSC Daily Current Affairs | Prelimbits 27-06-2025

New Test Kit for Haemophilia A and Von Willebrand Disease

Prelims: Current events of national and international importance

Why in News?

The National Institute of Immunohaematology has indigenously developed a cost-effective point-of-care test kit for the early diagnosis of Haemophilia A, and Von Willebrand Disease.

- The test offers a promising alternative to the current standard of care, which relies on complex and costly diagnostic procedures limited to very few tertiary facilities in India.
- The World Federation for Haemophilia has shown interest in procuring these tests for deployment in countries where the disease is prevalent.
- Haemophilia A and VWD are the two most common inherited bleeding disorders.

Hemophilia A

- It is also known as *factor VIII deficiency*, is a genetic bleeding disorder caused by a deficiency or malfunction of clotting factor VIII.
- This deficiency leads to prolonged bleeding, either spontaneously or after injuries or surgery, because the blood doesn't clot properly.
- It is typically inherited in an X-linked recessive pattern, primarily affecting males.
- **Symptoms** Symptoms can range from mild to severe, depending on the level of factor VIII in the blood.
- Mild cases may only cause prolonged bleeding after surgery or trauma, while severe cases can result in spontaneous bleeding into joints, muscles, or internal organs.
- **Treatment** Typically involves replacing the missing clotting factor VIII, either through infusions of factor VIII concentrates or newer therapies like emicizumab.

Von Willebrand Factor (VWF)

- VWF is a *protein in the blood* that plays a crucial role in blood clotting.
- It acts like a "glue" that helps platelets (small blood cells) stick to each other and the damaged blood vessel wall, forming a plug to stop bleeding.
- **Symptoms** Prolonged bleeding, Easy bruising, Frequent nosebleeds, Heavy menstrual periods.
- **Types of VWD** Type 1 is the most common and typically mild, while Type 2 has subtypes with varying degrees of severity, and Type 3 is the rarest and most severe.
- **Inheritance** -VWD is typically inherited, meaning it is passed down from parents to children through genes.
- Most cases are inherited in an autosomal dominant pattern, meaning only one copy of the affected gene from either parent is enough to cause the disease.
- **Treatment Desmopressin (DDAVP)** This medication can help release stored VWF from the body.
- **Replacement therapy** In some cases, purified VWF or a combination of VWF and factor VIII (another clotting factor) may be infused.
- **Other medications** Antifibrinolytic agents may be used to help prevent or slow down bleeding.
- **Prevalence in India** India is estimated to have 1.5 lakh people with haemophilia, but only about 27,000 are officially diagnosed
- \bullet Incidence of haemophilia A is 1 in 5,000 male births. VWD is known to affect 1% of the general population.
- The VWD is an autosomal disease. This means both males and females can get it equally. It is *not linked to gender like haemophilia*.
- Haemophilia A and Von Willebrand Disease (VWD) represent significant public health challenges in India due to underdiagnosis and limited access to diagnostic facilities.

Reference

Economic Times | Test Kit for Haemophilia A, Von Willebrand Disease

Decline in Oil Prices

Prelims: Current events of national and international importance

Why in news?

Recently the oil prices slipped as much as 9% which were soaring for the past

week due to Iran – Israel conflict.

Reasons for Decline in Oil Prices

- <u>Strait of Hormuz</u> remains open About 25% of the global oil supply passes through the Strait. Iran's decision not to close it calmed the oil market, reversing last week's price spike.
- **Iran's controlled retaliation** Iran retaliated to US involvement in the Israel-Iran conflict by attacking US military bases in Qatar, but *did not disrupt* the Strait of Hormuz a crucial oil shipping route which reduced fears of a major supply shock.
- **Ceasefire announcement -** US President Donald Trump announced a "fully agreed" ceasefire between Iran and Israel, boosting hopes of regional stability and reducing supply concerns.
- **Restoration of market confidence** Traders gained confidence that global oil supplies won't face significant disruption, pushing Brent crude prices down by up to 9%.

Implications of Declining Oil Prices:

- Upstream companies (Exploration & Production) They are hurt by lower prices as extraction costs remain fixed.
- Profit margins shrink and stock prices of companies like **ONGC** and **Oil India** fell by 2.94% and 5.6% respectively.
- **Downstream companies (Refining & Marketing)** Benefit from cheaper crude inputs. and higher profit margins on refined products.
- Stocks of **BPCL**, **HPCL**, and **IOC** rose by 1.92%, 3.24%, and 2.04% respectively.
- **Stable fuel prices** Crude oil falling below \$65/barrel could translate to cheaper petrol and diesel, though cost optimisations by oil companies may be needed.
- **Reduced vulnerability** India has diversified crude sources and built inventories.
- Many imports bypass the Strait of Hormuz, limiting exposure to West Asian disruptions.
- **Government assurance** Petroleum Minister Hardeep Singh Puri confirmed several weeks' worth of supplies are secured, and alternate routes are being utilised to maintain fuel availability.

Reference

The Hindu| Why oil prices have declined

SEBI Proposes Revamp of MIIs to Boost Governance

Prelims: Indian economy | Current events of national and international importance

Why in news?

Recently, Securities and Exchange Board of India (SEBI) proposed measures to strengthen the governance of market infrastructure institutions (MII) in a consultation paper.

- **MIIs** Market Infrastructure Institutions (MIIs) form the backbone of India's securities market and it include critical market entities like,
 - Stock Exchanges
 - Clearing Corporations
 - \circ Depositories

Reason for revamp

- Expanding scope of India's securities market.
- Past slippages in governance of MIIs raised concerns.
- Need to strengthen oversight and ensure smooth, transparent functioning.
- Prevent adverse impacts on the broader economy.

Key SEBI Proposals:

- Mandatory appointment of 2 Executive Directors (EDs) Where ED 1 is the Head of *Critical Operations and* ED 2 will be the Head of *Regulatory, Compliance, Risk Management & Investor Grievances*
- **Optional ED for commercial interests vertical –** Third vertical on *Business Development* — appointment of ED left to MIIs' discretion
- Inclusion of EDs in governing board EDs for the two critical verticals will be part of the MII Governing Board
- Their appointment, re-appointment will follow processes similar to MD, including possible SEBI approval
- **Reporting obligations** EDs must report quarterly to the Governing Board and SEBI on their respective areas
- **Restrictions on directorships -** MDs can take non-executive directorships in Unlisted government companies (Central/State) Non-profit companies
- EDs cannot hold directorships outside the MII's subsidiaries.

Significance

- It enhances transparency and accountability in MIIs.
- It clearly segregates critical and commercial functions.
- It ensures stronger oversight of operations and investor protection.
- It aims to bolster confidence in India's financial markets.

Reference

The Hindu| SEBI proposes revamp of MIIs to boost governance

Swiss Glaciers Show Holes

Prelims: Environment | Current events of national and international importance

Why in news?

Recently scientists in Switzerland have found that many glaciers are developing large holes, making them look like Swiss cheese.

- Holes in glaciers The glaciers are no longer "dynamic," meaning they aren't creating enough new ice from snowfall at higher altitudes to replace melting at lower altitudes.
- As a result, ice just melts in place, becoming weaker.
- Water flows or air movements inside the ice blocks create small holes.
- Over time, these holes grow bigger, their roofs collapse, and they become visible from the surface.



Reason for the Holes

- It is due to the fact the glaciers are losing strength and structure.
- Glaciers in Switzerland have been shrinking steadily, especially since the 1980s.
- The worst years for melting were 2022 and 2023.
 - Faster melting threatens:
 - Drinking water supplies
 - Agriculture
 - Hydropower (electricity from water)
 - $_{\circ}$ River flows during dry seasons
- **Recent incidents** A glacier collapse caused a massive mudslide in the Swiss village of Blatten.
- Some glaciers have lost up to 10 meters of vertical ice in a single year.
- **Global situation** Similar glacier losses seen in the Himalayas and Tian Shan range in Asia.
- Global warming is pushing melting to higher altitudes.
- The Paris Climate Agreement aimed to limit warming to 1.5°C, but many glaciers will disappear even if that target is met.
- **Significance** It reflects the tragedy of rapid climate change in real time.

Reference

The Hindu| Swiss Glaciers Show Holes

Global Tobacco Epidemic 2025 report

Prelims: Current events of national and international importance

Why in news?

Recently Global Tobacco Epidemic 2025 report is released by World Health Organization with the support of Bloomberg Philanthropies.

- **Global tobacco epidemic report** The report is released to assess how countries are implementing tobacco control measures recommended by the WHO under the **MPOWER** strategy, which aims to reduce tobacco use and save lives.
- Guidelines The WHO Framework Convention on Tobacco Control (WHO FCTC) and its guidelines provide the foundation for countries to implement and manage tobacco control.

- **MPOWER** To help make this a reality, WHO introduced the MPOWER measures.
- MPOWER measures are,
 - $_{\circ}$ M– Monitor tobacco uses and prevention policies;
 - $_{\circ}$ **P** Protect people from tobacco smoke;
 - \circ ${\boldsymbol O}\text{-}$ Offer help to quit tobacco;
 - $_{\circ}$ W– Warn about dangers of tobacco;
 - \circ E- Enforce bans on tobacco advertising; and
 - $_{\circ}$ **R** Raise taxes on tobacco products.
- The measures are intended to assist in the country-level implementation of effective interventions to reduce the demand for tobacco, contained in the WHO FCTC.
- The measure was started in 2007 with just 9 countries but it is now total of 110 countries now require these measures that protects 62% of the global population and 25 countries have adopted plain packaging.

Plain Packaging refers to the standardisation of tobacco product packaging to reduce its attractiveness and it is a proven tobacco control measure recommended by the WHO.

- World No tobacco day To raise awareness about the dangers of tobacco and advocate for effective control policies that encourage consumers to quit, the WHO observes World No Tobacco Day every year on May 31.
- The theme for 2025 is "Protecting children from tobacco industry interference,"
- India is among the six countries that received 2025 Bloomberg Philanthropies Awards for Global Tobacco Control for prioritizing tobacco cessation approaches to reach a significant number of tobacco users in the country.
- Other countries that received the award were Mauritius, Mexico, Montenegro, Philippines and Ukraine.

India's Progress in Tobacco Control

- **Strong graphic health warnings** India among top countries for bestpractice health warnings on tobacco packs.
- 85% of cigarette pack surface covered with warnings which is among the world's largest.
- Decline in tobacco use Overall tobacco use (including smokeless) is

declining but still higher than global average:

- 38% men and 9% women in India use tobacco.
- Global average is **35% men**, **8% women**.
- Among youth (13-15 years), tobacco use is **8%**, similar among boys and girls.
- Smoking prevalence in India is **7% among adults** (2023).
- Areas for improvement in India Need to ban point-of-sale tobacco ads completely.
- Raise taxes significantly to make tobacco products less affordable.
- Need to consider plain packaging for tobacco products.

Reference

The Indian Express | WHO report on global tobacco use

One Liners 27-06-2025

Geography

<u>Uttarakhand High Court Halts Illegal Sand Mining in Kosi River</u>

Recently,Uttarakhand High Court ordered a halt to illegal sand mining in the Kosi River in Bazpur tehsil following a public interest petition.

• **Origin -** The Kosi River originates from the confluence of tributaries in the Nepal and Tibet Himalayan regions.

• **States it Flows Through -** It flows through China (Tibet), Nepal, and India, primarily in Bihar.

• **Key Feature** - Known as the "Sorrow of Bihar," the Kosi is infamous for its frequent, devastating floods and braided, shifting channels.

• Tributary of - The Ganges River, merging with it in Bihar.

• Economic Impact - Its fertile sandy soils support extensive maize cultivation, but illegal mining threatens the ecosystem.

Polity & Governance

<u>Small Modular Reactor (SMR)-based nuclear power plant to be hosted</u> <u>in Bihar</u>

Recently, Union Power Minister Manohar Lal Khattar announced that Bihar would be among the first six states to get a Small Modular Reactor (SMR)based nuclear power plant.

• **SMR** - Are advanced, compact, and cost-effective nuclear reactors ideal for regions with smaller power grids, offering enhanced safety and scalability.

• **Strategic Vision** - This project is part of the Nuclear Energy Mission, backed by a Rs.20,000 crore budget, with the goal of establishing a nuclear plant in every state.

• Why Bihar - The plant will address Bihar's chronic power shortages, stabilize its grid, and support industrial growth.

• **Complementary Initiatives** - The Centre also sanctioned a 1,000 MW battery storage project for grid stability and renewable energy integration.

• **Power Vision 2035** - This aligns with India's long-term Power Vision 2035, a multi-energy roadmap integrating thermal, solar, wind, and nuclear power for sustainable growth.

International Relations and Issues

World Drug Day

World Drug Day observed annually on June 26th, World Drug Day raises global awareness against drug abuse and illicit trafficking.

• **Theme for 2025** - Is "Break the Cycle: Stop Organized Crime," linking the drug trade to other crimes.

• **Significance** - The day highlights the threat drugs pose to public health and global security, emphasizing a drug-free world.

• **UNODC's Role** - The United Nations Office on Drugs and Crime (UNODC) leads the global fight and publishes the annual World Drug Report.

• National Efforts - In India, the "Nasha Mukt Bharat Abhiyaan" (Drug-Free India Campaign) raises awareness, especially among youth.

• **Key Focus** - The day promotes collaborative efforts in prevention, treatment, and rehabilitation programs.

UN Charter Day

United Nations Charter Day is observed annually on June 26th.

• **Commemorates-** The signing of the UN Charter in San Francisco on June 26, 1945.

• **UN Charter** - The UN Charter is the UN's founding document, outlining its purposes and principles.

• **Core Aims** - Its core aims are to maintain international peace, uphold law, promote human rights, and foster global development.

• **Significance** - The day reaffirms the Charter's principles and emphasizes the importance of multilateralism.

• UN Day - The Charter officially came into force on October 24, 1945, which is celebrated as United Nations Day.

Iran Suspends Cooperation with IAEA

Recently, Iran's Parliament voted to suspend all cooperation with the International Atomic Energy Agency (IAEA) following military strikes by the US and Israel on its nuclear sites.

• **Triggering Events** - The decision was triggered by recent US airstrikes on June 22 and Israeli attacks on June 13, targeting Iranian nuclear facilities.

• **Parliament's Action** - The approved bill demands security guarantees for Iran's nuclear sites before resuming cooperation and accelerates the nuclear program.

• **Impact on Oversight** - This legislation would halt IAEA inspections, surveillance, and reporting, creating a significant gap in international oversight.

• **Shifts in Policy** - The move represents a major setback for the 2015 JCPOA, with Iran leveraging IAEA access for political gain.

• **Global Implications** - The decision has prompted calls for a UN Security Council meeting, raising concerns about nuclear proliferation and regional stability.

India Requests Pause on Indus Waters Treaty Proceedings

Recently,India has requested a pause in the World Bank-mediated proceedings concerning the Ratle and Kishanganga hydropower projects.

• Indus Waters Treaty (IWT) - The 1960 Indus Waters Treaty governs water sharing from the Indus River system between India and Pakistan.

• **Current Disputes** - Pakistan alleges that the Ratle and Kishanganga projects in Jammu and Kashmir violate the IWT's water flow requirements.

• **India's Stance** - India's decision to put the treaty in abeyance is contingent on Pakistan ceasing support for cross-border terrorism.

• **Pakistan's Response** - Pakistan has opposed India's request, insisting that the dispute resolution process must continue to protect its rights.

• **Future Implications** - This standoff could escalate regional water security concerns and bilateral tensions, with India reportedly planning further water diversion projects.

• **International Mediation** - Michel Lino, a neutral expert appointed by the World Bank, is a crucial mediator whose decision will shape the future of the treaty.

Economy

India's First Quantum Computing Valley to Emerge in Amaravati

The announcement for India's first Quantum Computing Valley was recently made during a high-profile workshop in Vijayawada on June 25, 2025.

• **Aim** - Is to establish a national quantum innovation hub in Amaravati by January 2026, fostering research and industry applications across sectors like healthcare and agri-tech.

• **Key Highlights** - The new Amaravati Quantum Valley Tech Park will create jobs, support startups, and provide training through the Ratan Tata Innovation Hub. Quantum computing is seen as a complementary, not a replacement, technology.

• **Partners** - IBM will deploy quantum computers, while LTIMindtree and TCS will focus on real-world applications.

• Use Cases - Quantum computing's applications include pharmaceutical research, EV battery optimization, logistics, and cryptographic security.

• National Quantum Mission Alignment - This initiative supports the National Quantum Mission's objectives to develop infrastructure, enhance computing capacity, and foster talent.

RBI Relaxes Priority Sector Lending Norms for SFBs

The Reserve Bank of India (RBI) has recently reduced the Priority Sector Lending (PSL) target for Small Finance Banks (SFBs) from 75% to 60%.

• **Purpose** - This relaxation provides SFBs with greater flexibility to diversify their loan portfolios and deploy capital in other sectors.

• **Impact on SFBs** - The move frees up approximately Rs.40,000 crore for SFBs, allowing them to expand into new areas like personal and vehicle loans.

• **Future Strategy** - SFBs can now diversify into different asset classes, potentially improving their asset guality and profitability.

• **Conversion to Universal Banks** - The RBI also introduced a new pathway for SFBs to convert into universal banks, encouraging expansion.

• **Revenue Stream** - SFBs can now earn revenue by selling Priority Sector Lending Certificates (PSLCs) if they exceed their targets.

Environment

<u>Wildfire on Chios Island, Greece</u>

On June 22, a wildfire erupted on Chios Island in Greece, leading to emergency evacuations due to strong winds.

• **Emergency Response** - Over 100 firefighters, supported by helicopters and planes, were deployed to battle the blaze. Reinforcements were also dispatched from other Greek cities.

• **Cause** - The fire was exacerbated by strong winds, making containment extremely challenging for ground and aerial crews.

Climate Change Link - The increasing frequency and size of wildfires in Greece are linked to a hotter, drier climate, a direct result of climate change.
Historical Context - Greece has a history of devastating wildfires, with the tragic 2018 Mati fire highlighting the severe risks to communities.

• **Future Outlook -** The country is now focusing on improving firefighting capabilities, prevention strategies, and community preparedness to mitigate future risks.

