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Neo-natal Deaths

- According to UNICEF, in India (2018), under 5 Mortality Rate is 39 deaths per 1000 live births.
- Infant Mortality Rate (under one year of age) is 32 deaths per 1000 live births.
- Neonatal Mortality Rate (during the first 28 days of life) is 24 deaths per 1000 live births.
- According to the National Health Mission (NHM) data, Madhya Pradesh has recorded the highest percentage of new-born deaths at 11.5% against the total admissions to government-run Sick Newborn Care Units (SNCUs) in the past three years across the country.
- The country's average percentage of new-born deaths is at 7 %.
- The neonatal deaths in India mainly occur due to
- 1. Premature births and low birth weight (35.9%),
- 2. Pneumonia (16.9%),
- 3. Birth asphyxia and birth trauma (9.9%),
- 4. Other non-communicable diseases (7.9%),
- 5. Diarrhoea (6.7%),
- 6. Congenital anomalies (4.6%) and
- 7. Infections (4.2%).

Reason behind high neo-natal deaths in MP

- Most tribal (31 out of 51) districts in Madhya Pradesh report low nutrition and weak maternal health levels and thus death percentage of more than 10.
- The absence of community referrals, significantly aided by Accredited Social Health Activist (ASHA) workers is lacking in rural and tribal areas as only one in ten sick neonates born outside a hospital is taken to an SNCU.
- It is majorly due to the absence of transport, inability to identify a disease

by parents, and lack of awareness.

- Urban areas of Madhya Pradesh report a higher death percentage as they offer tertiary care, and admit several serious cases from peripheral districts.
- With increasing institutional deliveries in the State (80.8% as per the National Family Health Survey-4, 2015-2016), the number of neonatal care units has not increased proportionally.

Sex Ratio in Admissions at Hospitals

- Madhya Pradesh has recorded an abysmal sex ratio in admission (number of girls admitted against 1,000 boys) at 663 in the three years against the country average of 733.
- More admissions of boys (almost three-fourths of the cases) show a bias against the girl child in society,
- The other reason for the lower admissions of a girl child can be attributed to better immunity among girl children to combat diseases.

Accredited Social Health Activist (ASHA)

- ASHA is a trained female community health activist.
- They are selected from the community itself and accountable to it, the ASHA works as an interface between the community and the public health system.
- The role of an ASHA is that of a community-level care provider, This includes a mix of tasks such as
- 1. Facilitating access to health care services,
- 2. Building awareness about health care entitlements especially amongst the poor and marginalized,
- 3. Promoting healthy behaviours.
- 4. Mobilizing for collective action for better health outcomes
- 5. Meeting curative care needs as appropriate to the organization of service delivery in that area.

SUTRA PIC

- Scientific Utilisation Through Research Augmentation Prime Products from Indigenous Cows (SUTRA PIC) is led by Department of Science and Technology.
- It is a programme to research on 'indigenous' cows, funded by multiple scientific ministries.

- It has the Department of Biotechnology, the Council of Scientific and Industrial Research, the Ministry for AYUSH (Ayurveda, Unani, Siddha, Homoeopathy) among others and the Indian Council of Medical Research as partners.
- It has five themes such as
- 1. Uniqueness of Indigenous Cows,
- 2. Prime-products from Indigenous Cows for Medicine and Health,
- 3. Prime-products from Indigenous Cows for Agricultural Applications,
- 4. Prime-products from Indigenous Cows for Food and Nutrition,
- 5. Prime-products from indigenous cows-based utility items.

Research on Panchgavya

- Panchagavya is an Ayurvedic panacea and is a mixture of five (pancha) products of the cow (gavya) milk, curd, ghee, dung and urine.
- Its proponents believe it can cure, or treat a wide range of ailments.
- In 2017, SEED constituted a National Steering Committee (NSC) for 'Scientific Validation and Research on Panchgavya (SVAROP)'.
- Indian Institute of Delhi's Centre for Rural Development and Technology (CRDT), is involved in SVAROP discussion and would be submitting research proposals to SUTRA PIC.

The Battle of Çanakkale

- It was also known as the Gallipoli campaign or the Dardanelles campaign, is considered to be one of the bloodiest of World War I,
- During this battle the Ottoman army faced off against the Allied forces, leading to the slaughter of tens of thousands of soldiers on both sides.
- In March 1915, Winston Churchill, devised a plan to take control of the Dardanelles, the strategic strait connecting the Sea of Marmara to the Aegean Sea and the Mediterranean Sea.
- And thus reach Constantinople (today's Istanbul) at the mouth of the Bosporus.
- By taking Constantinople, the Allies hoped to break the Turks, who had recently entered the war on the side of the Germany.
- The Allies carried out heavy naval bombardment of Turkish forts along the shores of the Dardanelles, and when that failed, followed up with what was the biggest amphibious landing in military history at the time.
- The battle resulted in a demotion for Churchill and the emergence on the Turkish side of the young military hero, Mustafa Kemal Ataturk.

State of Rampur

- The state of Rampur was founded by Nawab Ali Muhammad Khan, the adopted son of Sardar Daud Khan, the chief of the Rohillas in Northern India.
- The Rohillas were Afghans who entered India in the 18th century as the Mughal Empire was in decline, and took control of Rohilkhand, at the time known as Katehr.
- Rampur, under Nawab Raza Ali, was the first kingdom to accede to India in 1949, becoming the only Muslim-majority district in Uttar Pradesh.
- Soon after accession, the Nawab handed over the official royal residence, the Rampur Qila or Fort, built in 1775, to the Indian government, along with a several other properties such as the royal complex, which is now used as the district collectorate that houses the offices of the District and City Magistrates.
- In return, the Indian government bestowed two key rights to the Nawab —
 he was granted full ownership of the properties, and guaranteed
 succession to the gaddi or rulership of the state based on customary law,
 which gave exclusive property rights to the eldest son.
- There are five royal properties left with the Rampur royals, now up for division between the different branches of the family.
- These include the summer residence, the Khas Bagh Kothi, the Benazir and Shahbad Kothis, the Sarhari Kunda, and the Rampur royals' railway station, built for the exclusive use of the royal family.
- The Rampur royals have played an important role in the socio-cultural history of the Ganga-Yamuna belt.
- They run the Amir Raza library in Rampur, once known as the official darbar of the Nawab, which is home to some 15,000 manuscripts in Arabic, Urdu, Persian and Turkish, as well as a seventh-century Quran.
- In the 19th century, the royals established courts of law and a standing army, and built irrigation works.
- In the 20th century, they set up sugar and textile mills.

Lorcaserin

- Lorcaserin (brandname Belviq or Belviq XR) is a weight-loss drug.
- Lorcaserin has been withdrawn from the U.S. market after caution by the U.S. Food and Drug Administration because of cancer risk.
- The agency also said that health care professionals should stop prescribing and dispensing the drug to patients.
- Following this Indian doctors have also cautioned against the use of the

drug.

MicroRNAs

- Researchers from National Centre for Biological Sciences, Bengaluru, have discovered how small molecules called microRNAs are made in plants.
- This finding makes it much easier for studying processes in plants.
- MicroRNAs are small molecules, about 21 nucleotides long, and help in controlling the levels of proteins in the cell.
- All growth and development in plants are regulated at various levels in the cell, and mediated by proteins
- In order to decrease the level of a particular protein in specific cells, the microRNAs destroy the messenger RNA molecules that help with the production of that specific protein in the cell.
- The microRNA molecules do this by cutting down that particular messenger RNA thereby destroying it.
- This process is called the silencing of the messenger RNA.
- The microRNA that achieve this silencing are evolutionarily conserved that is, they are found in all flowering plants, whether they are mosses or roses.
- Similarly, the best way to study the effect of a gene in the DNA is to silence or "knockout" the gene.
- Knocking out a gene does not mean removing the entire gene.
- In knocking out processes, those RNA that induce the gene to produce proteins are destroyed or their levels are reduced by the microRNA as described earlier.

Source: Indian Express, the Hindu

