

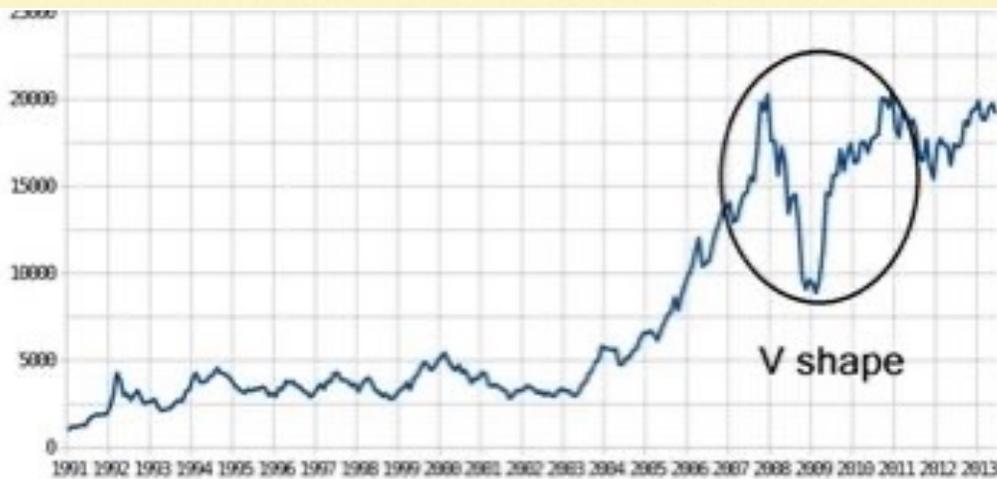
11,000 new cases and 392 deaths reported yesterday.

V-Shaped Recovery

A V-shaped recovery is characterized by a sharp economic decline followed by a quick and sustained recovery.

The recession of 1953 is an example of a V-shaped recovery.

A V-shaped recovery is different from an L-shaped recovery, in which the economy stays in a slump for a prolonged period of time.



National Institutional Ranking Framework (NIRF)

The National Institutional Ranking Framework (NIRF) was launched by the Minister of Human Resource Development on 29th September 2015.

This framework outlines a methodology to rank institutions across the country.

The parameters broadly cover

Teaching, Learning and Resources,
Research and Professional Practices,
Graduation Outcomes,
Outreach and Inclusivity and
Perception.

NIRF rankings 2019 has been given under 8 categories: Overall, Universities, Engineering, Medical, Management, Law, Architecture, Pharmacy and Colleges.

Atal Ranking of Institutions on Innovation Achievements (ARIIA)

It is an initiative of Ministry of Human Resource Development (MHRD), Govt. of India to systematically rank all the major higher educational institutions and universities in India on indicators related to "Innovation and Entrepreneurship Development" amongst students and faculties.

Major Indicators are:

Budget & Funding Support.

Infrastructure & Facilities.

Awareness, Promotions & support for Idea Generation & Innovation.

Promotion & Support for Entrepreneurship Development.

Innovative Learning Methods & Courses.

Intellectual Property Generation, Technology Transfer & Commercialization.

Innovation in Governance of the Institution.

More than quantity, ARIIA focuses on quality of innovations and tries to measure the real impact created by these innovations nationally and internationally.

Amidst the ongoing Covid-19 pandemic, medical practitioners have reported a condition called silent or happy hypoxia, in which patients have extremely low blood oxygen levels, yet they do not show signs of breathlessness.

It has left medical practitioners confused and many of them are now advocating for its early detection as a means to avoid a fatal illness called Covid pneumonia.

Key Points

Hypoxia

It is a condition wherein there is not enough oxygen available to the blood and body tissues. Hypoxia can either be generalised, affecting the whole body, or local, affecting a region of the body.

Normal arterial oxygen is approximately 75 to 100 millimetres of mercury (mm Hg) and normal pulse oximeter readings usually range from 95 to 100%.

Values under 90% are considered low.

When levels fall below 90%, patients could begin experiencing lethargy, confusion or mental disruptions because of insufficient quantities of oxygen reaching the brain.

Levels below 80% can result in damage to vital organs.

Silent Hypoxia

It is a form of oxygen deprivation that is harder to detect than regular hypoxia because patients appear to be less in distress.

Covid pneumonia, a serious medical condition found in severe Covid-19 patients, is preceded by silent hypoxia.

Many Covid-19 patients with oxygen levels below 80% look at ease and alert. There have been a few cases of oxygen levels below 50% as well.

Those with such low levels of oxygen would normally appear extremely ill but not in silent hypoxia cases.

In many cases, Covid-19 patients with silent hypoxia did not exhibit symptoms such as shortness of breath or coughing until their oxygen fell to acutely low levels, at which point there was a risk of acute respiratory distress (ARDS) and organ failure.

Reasons

The reason why people are left feeling breathless is not because of the fall in oxygen levels itself but due to the rise in carbon dioxide levels that occur at the same time, when lungs are not able to expel this gas efficiently.

In some Covid-19 cases, this was not the response and patients did not feel breathless.

It happened because in patients with Covid pneumonia, the virus causes air sacs to fall, leading to a reduction in levels of oxygen. However, the lungs initially do not become stiff or heavy with fluid and remain compliant meaning they are able to expel carbon dioxide and avoid its buildup. Thus, patients do not feel short of breath.

A medical device called a pulse oximeter can be used in the early detection of silent hypoxia. Active Covid-19 or suspected cases can check their oxygen levels early on by using the device. A fall in oxygen levels can serve as a signal for seeking additional treatment immediately. Concerns have been raised against it arguing that the frequent use of the device would lead to increased anxiety.

Pulse Oximeter

It is a test used to measure the oxygen level (oxygen saturation) of the blood.

The device measures the saturation of oxygen in red blood cells (RBCs) and can be attached to a person's fingers, toes, nose, feet, ears or forehead.

The method is easy and painless and the device can be reused or disposed of after use.

It is generally used to check the health of patients with known conditions that affect blood oxygen levels like heart and lung conditions.

Covid Pneumonia

It is a potentially deadly condition in Covid-19 patients which affects the lungs' ability to transfer oxygen and causes breathing difficulties.

When a person cannot inhale enough oxygen and exhale enough carbon dioxide, the pneumonia can lead to death.

Covid pneumonia is especially severe because it is viral and it completely affects the lungs instead of small parts.

Other kinds of pneumonia which are caused mainly by bacteria and can be treated using antibiotics are less severe than Covid pneumonia.

Patients are required to be put on ventilator support in such severe cases to ensure adequate circulation of oxygen in the body.

Indian Gaur:

The Gaur also called Indian Bison, is the largest extant bovine, native to South Asia and Southeast Asia.

It has been listed as Vulnerable on the IUCN Red List.

Gaur historically occurred throughout mainland South and Southeast Asia, including Vietnam, Cambodia, Laos, Thailand, Peninsular Malaysia, Myanmar, India, Bangladesh, Bhutan, China and Nepal.

Gaur are largely confined to evergreen forests or semi-evergreen and moist deciduous forests, but also occur in deciduous forest areas at the periphery of their range.

Gaur is highly threatened by poaching for trade to supply international markets.