



# World Sickle Cell Disease Day 2021

## Why in News

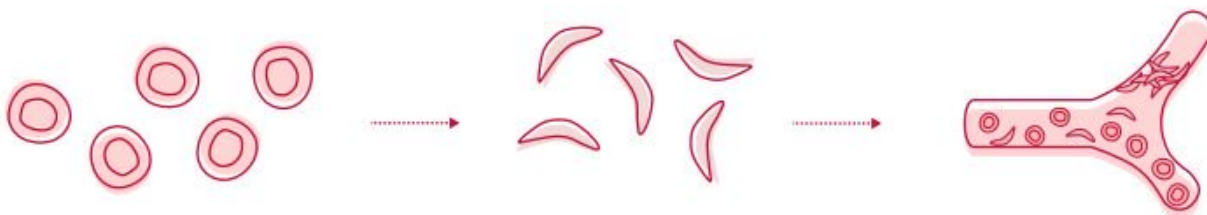
To commemorate the [World Sickle Cell Disease \(SCD\) Day](#) on **19<sup>th</sup> June**, the **Ministry of Tribal Affairs (MOTA)** flagged off mobile vans under the **Unmukt project** for strengthening screening and timely management of SCD in tribal districts of Jharkhand and Chhattisgarh.

- The [United Nations General Assembly \(UNGA\)](#) adopted a resolution recognising SCD as a public health problem on **22<sup>th</sup> December, 2008**.
- The UNGA also recognised SCD as one of the first [genetic diseases](#).

## Key Points

- **Sickle Cell Disease:**
  - It is **an inherited blood disease** which is most common among people of African, Arabian and Indian origin.
  - It is a group of disorders that **affects hemoglobin, the molecule in red blood cells that delivers oxygen** to cells throughout the body.
  - People with this disease have atypical hemoglobin molecules called **hemoglobin S, which can distort red blood cells into a sickle**, or crescent shape.
    - This **blocks blood flow and oxygen from reaching all parts of the body**.

## // What is Sickle Cell Disease?



### SCD is a blood disorder

Sickle Cell Disease (SCD) is an **inherited blood disorder** that affects red blood cells. Normal red blood cells are round and flexible, which lets them travel through small blood vessels to deliver oxygen to all parts of the body.

### Causing misshapen blood cells

SCD causes red blood cells to **form into a crescent shape**, like a sickle.

### Creating painful complications

The sickle-shaped red blood cells break apart easily, clump together, and stick to the walls of blood vessels, **blocking the flow of blood**, which can cause a range of serious health issues.

- **Symptoms:**

- It can cause **severe pain**, referred to as sickle cell crises.
- Over time, people with sickle cell disorders can experience **damage to organs including the liver, kidney, lungs, heart and spleen**. Death can also result from complications of the disorder.

#### ▪ **Treatment:**

- Medication, blood transfusions and rarely a bone-marrow transplant.

#### ▪ **Related Data:**

- India alone is home to about **1,50,000 patients with SCD and about 88% of Sickle Cell Anemia (SCA) cases in Asia**.
- The disease in India occurs predominantly in eastern **Gujarat, Maharashtra, Madhya Pradesh, Chhattisgarh, western Odisha** and in pockets of the **Nilgiri Hills in north Tamil Nadu and Kerala**.
- The disease is **prevalent among tribal communities** (including children).
  - As per MOTA, SCD is affecting more women and children and nearly **20% of tribal children with SCD die before reaching the age of two**, and **30% children die before reaching adulthood**.

#### ▪ **Challenges:**

- **Social Stigma and Prevalence among Tribal Population** (where access to care for SCD is limited).
- **School Drop Out:**
  - Children with sickle cell disease often have to drop out from school.
- **Policy Issue:**
  - The delayed implementation of the **2018 draft policy on haemoglobinopathies**.
  - The policy aims to provide evidence-based treatment for patients and reduce the number of new-born children with sickle cell disease through initiatives such as the Sickle Cell Anaemia Control Program, screening and prenatal diagnosis.

#### ▪ **Initiatives by India:**

- **Initiative by the Ministry of Tribal Affairs:**
  - **SCD Support Corner**, a portal to collect real time data and provide relevant information related to Sickle Cell.
    - It will help in making a **Central Repository of data**.
  - An **'Action Research' project** under which [Yoga](#) dependent lifestyle is promoted to reduce the complications in the patient suffering from this disease.
- **Expanded Screening:**
  - Certain states, such as Chhattisgarh and Gujarat, have **expanded their screening programmes from hospital to school-based screenings**.
  - Extrapolating such screening efforts and implementation strategies to other states will help **map the prevalence of the disease**.
- **Disability Certificate:**
  - The Ministry of Social Justice and empowerment has increased the validity of **disability** certificates for SCD patients from **1 year to 3 year**.

[Source: PIB](#)

