



Government of India  
Ministry of Chemicals & Fertilizers  
Department of Pharmaceuticals

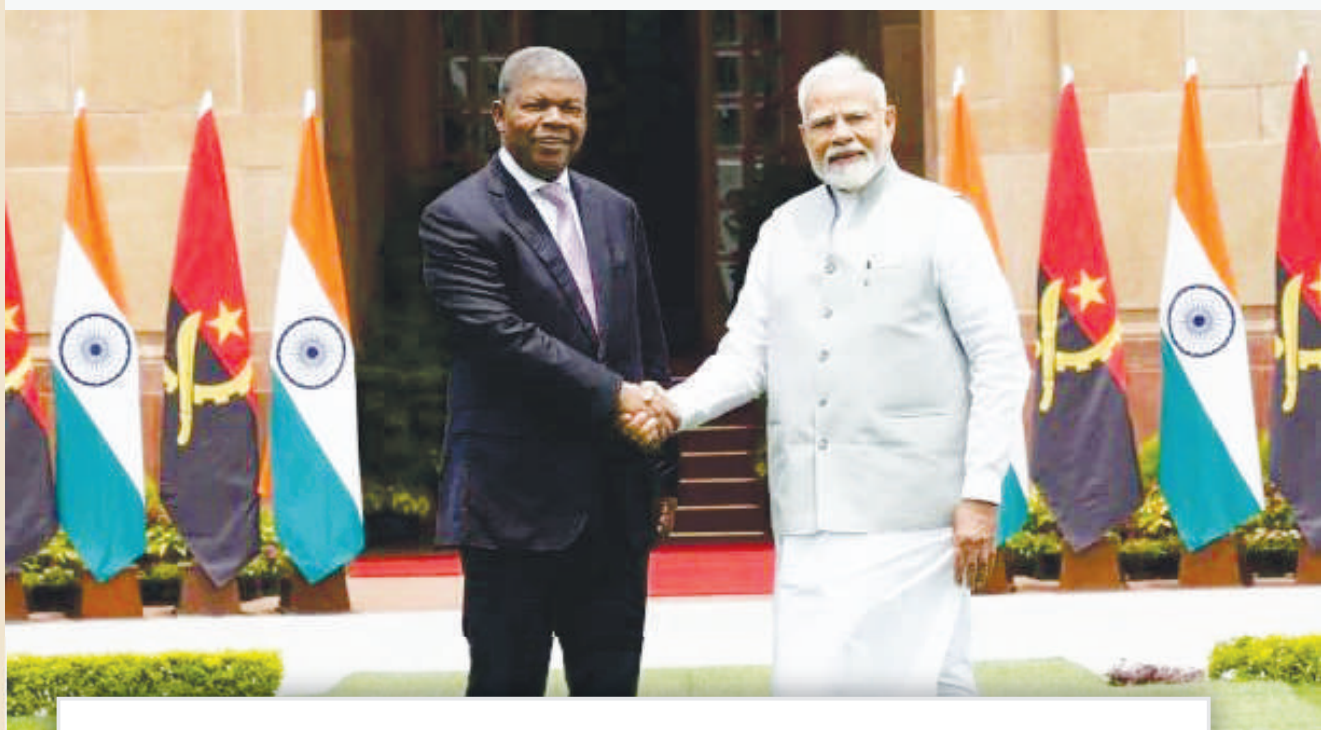
# Jan Aushadhi VARTA



EDITION 35

10<sup>th</sup> June, 2025

## India-Angola *Strengthen Healthcare Ties*



During delegation-level talks in New Delhi, Honourable Angolan President H.E. João Manuel Gonçalves Lourenço solicited India's support to strengthen Angola's healthcare infrastructure. In a press briefing on May 4, 2025, MEA Secretary Shri Dammu Ravi highlighted extensive discussions on health cooperation. Hon'ble Prime Minister Shri Narendra

Modi outlined potential exports of vaccines, medicines, and pharma products, alongside establishing the Janaushadhi Kendra in Angola. This initiative aligns with India's commitment to enhancing bilateral ties, with new pacts signed in healthcare, Ayurveda, agriculture, and culture.



Total No.  
of Kendras  
**16489**  
(till 30.05.2025)



Total Sales crossed  
**Rs. 282.37 Crore**  
FY 2025-26  
(till 30.05.2025)



Estimated Savings Approx  
of **1129.49 Crore** to  
Citizens FY 2025-26  
(till 30.05.2025)



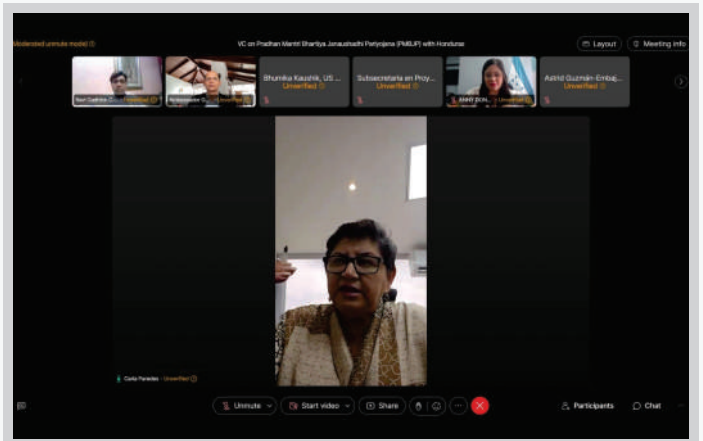
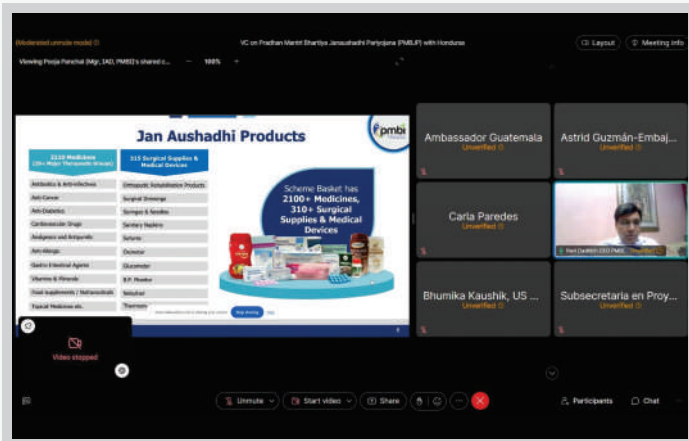
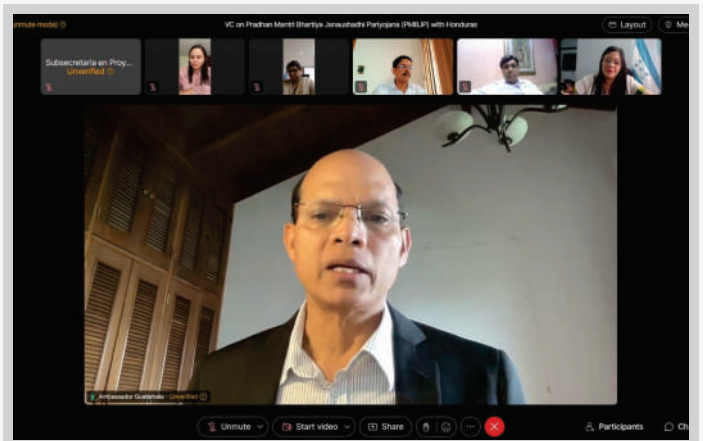
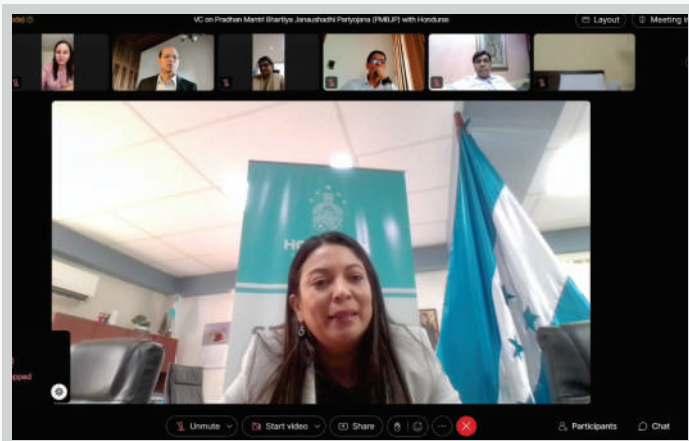
Sales of  
May 2025 is  
**197.46 Crore**

# HIGHLIGHTS



May 16th, 2025

## India-Honduras *explore* Jan Aushadhi Partnership



On 16th May, 2025, the Embassy of Guatemala hosted a virtual meeting between Honduras' Minister and Vice Minister of Secretaría de Salud and Shri Ravi Dadhich (IAS), CEO, PMBI, with Ambassador of India to Guatemala, El Salvador & Honduras Shri Manoj Kumar Mohapatra in attendance. The discussion focused on introducing the Janaushadhi

Pariyojana in Honduras. The CEO, PMBI, elaborated on the Jan Aushadhi model, emphasizing affordable, quality medicines. Honduran delegates expressed strong interest in adopting the scheme to enhance healthcare access. This collaboration marks a significant step in strengthening India-Honduras ties through healthcare innovation.



May 10th, 2025

## India-Maldives *enhances* Health cooperation through the **Janaushadhi** model



India and the Maldives solidified their healthcare partnership through a strategic agreement between the Maldives' State Trading Organization Plc (STO) and HLL Lifecare Limited on 10th May, 2025. This initiative ensures a steady supply of affordable, quality Jan Aushadhi medicines to the Maldives, addressing past stock-outs that strained

the national health system. Through the support of an extensive network of Jan Aushadhi Kendras that offer more than 2210 medicines and 310+ surgical equipments across India, Jan Aushadhi is all set to tie up with international partners. The partnership aims to provide a sustainable solution for essential medicines to foreign countries.



# HIGHLIGHTS



June 1st 2025 to June 30th 2025

## *An Unparalleled Opportunity:* **ELP with Janaushadhi**



After the Honourable Prime Minister Shri Narendra Modi pledged to boost the practical abilities of young Indians during his Mann Ki Baat program on 30th March, 2025, a new initiative with Janaushadhi was rolled out. MY Bharat, a Ministry of Youth Affairs and Sports initiative, empowers the country's youth by promoting social mobility, ensuring equal access to education, and fostering hands-on skill growth. In partnership with PMBI, a 15-day training program was launched to provide a unique chance to explore Jan Aushadhi Pariyojana via the Mera Yuva Bharat platform (MY Bharat).

The features of the program are as follows:

- Raise youth awareness about affordable healthcare and the role of generic medicines.
- Provide MY Bharat volunteers with hands-on experience in Jan Aushadhi Kendra operations and business model.
- Teach supply chain management for Jan Aushadhi Kendras.
- Share details of the Suidha Sanitary Pad Scheme under Jan Aushadhi Kendra.
- Promote health check-up information within local communities.
- Foster a network through the initiative.

Participating in the Experiential Learning Program (ELP) offers numerous advantages for young individuals. They can gain hands-on exposure to the operations of Jan Aushadhi Kendra, providing a real-world understanding of its functioning, can also engage in community-based learning to master inventory management and basic record-keeping skills. This ELP also enhances youth's communication abilities while cultivating business discipline and effective customer-handling techniques. In addition, one can experience grassroots-level healthcare outreach, deepening your appreciation for the critical role of healthcare services and finally contribute valuable feedback to improve the system, making a meaningful impact on future initiatives.

The Experiential Learning Program (ELP) commenced on June 1st, 2025, to June 30th, 2025. Registration for the program is already underway, and interested individuals can find all necessary details on the official website. The ELP will take place at 1200 selected Pradhan Mantri Bhartiya Janaushadhi Kendras across India. Upon successful completion, participants will be awarded a certificate from MY Bharat, Ministry of Youth Affairs and Sports, Government of India, as recognition of their achievement.

Join the **15-day Experiential Learning Program** at Jan Aushadhi Kendra

**Objectives**

1. Awareness about affordable healthcare solution
2. To build a network of youth ambassadors
3. Information about Suidha Sanitary Pad Scheme

Speaker: **Shri Ravi Dadhich, IAS**  
CEO, Pharmaceuticals & Medical Devices Bureau of India (PMBI)

Thursday, 22nd May, 2025  
4:00pm Onwards

To know more  
Join the Webinar Link in the Description OR Scan the QR Code

**Real Experience. Real Impact.**

Join the **Jan Aushadhi Kendra Experiential Learning Program**  
Under the Government of India's PMBJP scheme

**Key Learning Areas**

- + Inventory Management: Track and manage stock effectively.
- + Record Keeping: Maintain accurate records.
- + Customer Service: Enhance communication with customers.
- + Community Outreach: Promote public health initiatives.

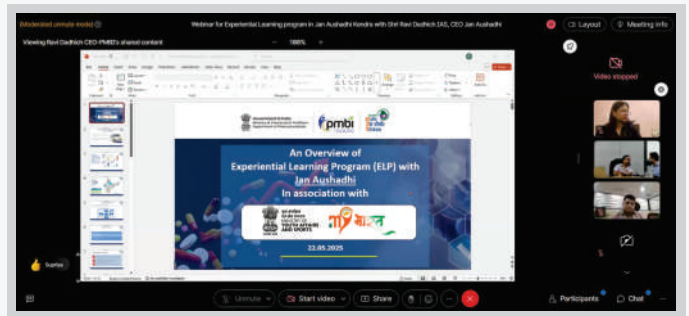
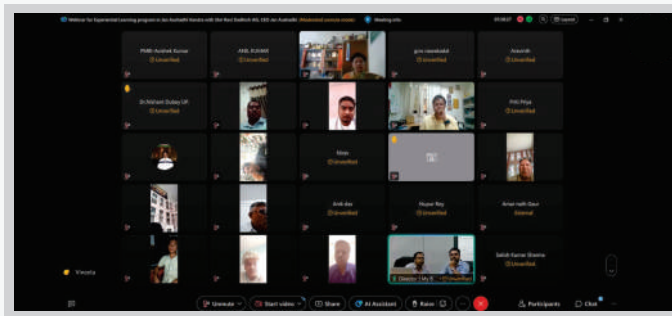
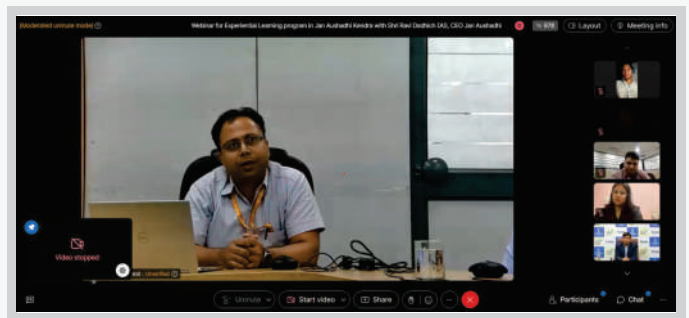
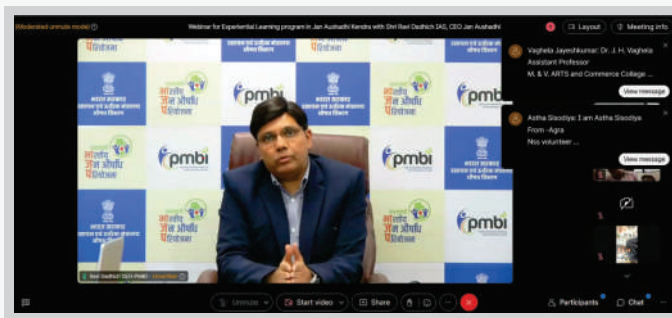
To Know More Visit MY BHARAT WEBSITE  
<https://mybharat.gov.in/>

# HIGHLIGHTS



May 22nd, 2025

## *Insightful Webinar session on* **Experiential Learning Program** *at MY Bharat Portal (22.05.2025)*



In association with MY (Mera Yuva) Bharat, Mr. Ravi Dadhich, CEO, PMBI conducted an insightful webinar on the Experiential Learning Program (ELP) at Janaushadhi Kendra, which is delivering a nationwide address on 22nd May. The webinar was attended by more than 4000 enthusiastic volunteers, YUVAs, and Janaushadhi Kendra owners who are interested in taking part in this program.

The webinar highlighted the features of the ELP program that offers an opportunity to the youth to explore ideas such as inventory Management, customer service, community outreach, and much more! The CEO, PMBI, further highlighted that these ELPs will provide a chance to contribute to public health and build valuable skills, and called for nationwide participation.



# IN THE NEWS

THE TIMES OF INDIA | May 04, 2025

## “Angolan President specifically asked for India's support in healthcare”: MEA



Ministry of External Affairs said that Angolan President Joao Manuel Goncalves Lourenco "specifically" requested India's support in improving healthcare infrastructure in Angola during the delegation level talks with Prime Minister Narendra Modi in Delhi.

Addressing a press briefing on Saturday, MEA secretary (Economic Relations) Dammu Ravi said, "In the health area, there was a lot of discussion. Angolan President Lourenco specifically asked for India's support in healthcare, doctors and paramedical forces. There is a need in great numbers. They are expanding the healthcare sector with the creation of new hospitals in that country. And Honorable Prime Minister mentioned about not only the possibility of supplying vaccines and medicines and pharma products in Africa, but also to be able to set up Janaushadhi units in that country. We will be exploring that opportunity."

THE NEW INDIAN EXPRESS | May 11, 2025

## Andhra government to set up Jan Aushadhi shops at all GGHs to curb overpricing on drugs

**VIJAYAWADA:** The State health department has decided to set up Jan Aushadhi shops at all Government General Hospitals (GGHs) to provide affordable generic medicines and curb excessive pricing by private drug retailers.

Health Minister Y Satya Kumar Yadav approved the initiative following a review of existing private medical stores operating at 16 GGHs. Currently, 23 private stores operate in these hospitals, while Nandyal GGH has none. These stores have been flagged for charging profit margins ranging from 50% to 600% on certain drugs, officials said.

The proposed Jan Aushadi outlets will be run by the Indian Red Cross Society under the Pradhan Mantri Bharatiya Jan Aushadi Pariyojana (PM-BJAP). The scheme mandates a maximum profit margin of 15%, aiming to prevent price exploitation. Sales will be monitored using software developed by the Department of Pharmaceuticals to ensure pricing transparency.

Officials highlighted that many private stores currently operate under the guise of self-help groups or cooperative societies but exploit pricing loopholes, sell branded drugs without prescriptions, and stock only 30% to 40% of essential generic medicines.

NBT नवभारत टाइम्स | May 26, 2025

## जन औषधि से 11 साल में 38 हजार करोड़ की बचत

Bhupender.Sharma  
@timesofindia.com



■ नई दिल्ली : सस्ती और गुणवत्तापूर्ण दवाएं उपलब्ध करवाने के मकसद के साथ शुरू की गई प्रधानमंत्री भारतीय जन औषधि परियोजना में अभी तक देश भर में 16300 जन औषधि केंद्र खोले गए हैं। 31 मार्च 2026 तक इन केंद्रों की संख्या 20 हजार और 2027 तक 25000 करने का लक्ष्य रखा गया है।

केंद्र सरकार के बड़े अस्पतालों AIIMS, RML और सफदरजंग में आने वालों को इन दवाइयों का फायदा मिल ही रहा है। वहीं, रसायन एवं उर्वरक मंत्रालय के तहत आने वाले फार्मास्यूटिकल्स एंड मेडिकल डिवाइसेस ब्यूरो ऑफ इंडिया (PMBI) ने दिल्ली सरकार के 26 अस्पतालों के कैपस या उनके आसपास केंद्रों को खोलने की प्रारंभिक मंजूरी दे दी है। सरकार के मुताबिक पिछले 11 वर्षों में जन औषधि परियोजना ने आम जनता के करीब 38 हजार करोड़ रुपये बचाए हैं।

**टॉप 5 में यूपी:** उत्तर प्रदेश में सबसे ज्यादा 3270 जन औषधि केंद्र खोले जा चुके हैं। केरल में 1603, कर्नाटक में 1459, तमिलनाडु में 1397 और बिहार में

884 केंद्र शुरू हो गए हैं। दिल्ली में अभी 514 केंद्र हैं, जिसमें बढ़ोतरी होगी।

**दिल्ली में मंजूरी :** दिल्ली सरकार के 26 अस्पतालों में भी यह सुविधा होगी। सरकार की ओर से शुरूआती मंजूरी दे दी गई है और अब टेंडर कर जगह फाइनल की जा रही है।

मंत्रालय के एक सैनियर अधिकारी का कहना है कि दिल्ली सरकार के सभी बड़े अस्पतालों एलएनजेपी, जीबी पंत अस्पताल, जेटीबी, संजय गांधी अस्पताल, डीडीयू अस्पताल समेत सभी में आने वाले मरीजों को सस्ती दवाइयां मिल सकेंगी।

**7350 करोड़ रुपये बचे :** जन औषधि केंद्रों पर जेनेरिक दवाइयां बेची जा रही हैं, जिनके मूल्य खुले बाजार में उपलब्ध ब्रांडेड दवाइयों के मूल्यों की तुलना में 50 से 80 प्रतिशत तक कम होते हैं। 2023-24 में इनके माध्यम से आम जनता के 7350 करोड़ रुपये बचे हैं।

जनसत्ता | May 06, 2025

## यूपी सरकार ने दी गुड न्यूज़, अब हर CHC में मिलेंगी सस्ती और जेनेरिक दवाएं



Jan Aushadhi Kendra in UP: उत्तर प्रदेश में स्वास्थ्य सेवाओं को लेकर खुशखबरी आई है कि अब हर एक सामुदायिक स्वास्थ्य केंद्र यानी CHC में जन औषधि के केंद्र खोले जाएंगे। यहां सभी तरह की जेनेरिक दवाएं सस्ते दामों में उपलब्ध होंगी। जानकारी के मुताबिक इस फैसले पर अमल करने के लिए जिला स्तर पर एजेंसीज तय की जा रही हैं और केंद्रों की निगरानी के लिए तंत्र को भी डेवलप किया जा रहा है।



# IN THE NEWS

अभ्य इंडिया

May 23, 2025

सच्ची खबरें, अचूकी खबरें

## जन औषधि केन्द्र में युवाओं के लिए प्रशिक्षण कार्यक्रम के लिए आवेदन आमंत्रित

युवा कार्यक्रम एवं खेल मंत्रालय भारत सरकार द्वारा माय भारत इनिशिएटिव के अंतर्गत जन औषधि केन्द्र के सहयोग से अनुभवात्मक प्रशिक्षण कार्यक्रम का आयोजन 1 जून से 30 जून 2025 के मध्य किया जाना प्रस्तावित है।

जिला युवा अधिकारी भूपेन्द्र सिंह शेखावत ने बताया कि आवेदन माय भारत पोर्टल [www.mybharat.gov.in](http://www.mybharat.gov.in) के एक्सपीरियेंसियल लर्निंग टैब के माध्यम से किया जाना है। आवेदक सीनियर सैकेंडरी उत्तीर्ण होना चाहिए। आवेदक को जन औषधि केन्द्र में भंडार प्रबंधन, सामान्य रिकॉर्ड रखरखाव, ग्राहक सेवा और जान स्वास्थ्य को समझने में सहायता मिलेगी। श्रीगंगानगर जिले में 2 जन औषधि केंद्रों पर यह कार्यक्रम आयोजित होगा तथा प्रति जन औषधि केन्द्र अधिकतम 5 युवाओं को इस अनुभवात्मक प्रशिक्षण कार्यक्रम में सहभागिता का अवसर मिलेगा।

अनुभवात्मक प्रशिक्षण कार्यक्रम में प्रतिदिन 8 घंटे कार्य कर उस कार्य को सीखा जाता है और यह कार्यक्रम 120 घंटे का होता है। कार्यक्रम पूर्ण होने के बाद माय भारत की तरफ से डिजिटल प्रमाण पत्र दिया जाता है। अन्य जानकारी हेतु इच्छुक युवा माय भारत के टोल फ्री नंबर 18002122729 पर संपर्क कर सकते हैं अथवा जिला माय भारत केन्द्र या संबंधित एनएसएस यूनिट में संपर्क कर सकते हैं।

सैयल बुलेटिन

May 06, 2025

## गुवाहाटी में गरीबों के लिए वरदान बना प्रधानमंत्री जन औषधि केंद्र



**गुवाहाटी।** असम के गुवाहाटी में प्रधानमंत्री जन औषधि केंद्र गरीब और जरूरतमंद लोगों के लिए एक वरदान साबित हो रहा है। इस योजना के तहत सस्ती और गुणवत्तापूर्ण दवाइयों की उपलब्धता ने न केवल लोगों का आर्थिक बोझ कम किया है, बल्कि उन्हें बेहतर स्वास्थ्य सुविधाएं भी प्रदान की हैं। स्थानीय लोगों ने इस योजना की जमकर सराहना की है और प्रधानमंत्री नरेंद्र मोदी को इसके लिए धन्यवाद दिया है। गुवाहाटी के जन औषधि केंद्रों पर लोगों की भारी भीड़ देखी जा रही है। लोगों का कहना है कि इस योजना ने उनकी जिंदगी में बड़ा बदलाव लाया है।

प्रधानमंत्री जन औषधि केंद्र से दवाइयां बहुत सस्ते दामों में मिल रही हैं, जबकि सामान्य दवाखानों या अन्य फार्मसियों में जहां हमें दवाइयों के लिए मोटी रकम चुकानी पड़ती थी।

NEWS NATION

May 11, 2025

## जम्मू-कश्मीर: जन औषधि केंद्रों से सस्ती दवाएं पाकर राहत महसूस कर रहे बारामुला के निवासी

**बारामुला,** 11 मई (आईएनएस)। प्रधानमंत्री भारतीय जन औषधि परियोजना (पीएम-बीजेपी) के तहत खोले गए जन औषधि केंद्रों में आम लोगों को सस्ती दवाएं उपलब्ध हो रही हैं। जम्मू-कश्मीर के बारामुला जिले में हजारों परिवार जन औषधि केंद्रों के नियमित ग्राहक बन गए हैं। वे निजी मेडिकल स्टोर से स्थायी रूप से दूर हो गए हैं और अब सस्ती कीमतों पर दवाएं खरीद रहे हैं। कई ग्राहकों ने समाचार एजेंसी आईएनएस से बात करते हुए बताया कि सरकार की स्वास्थ्य सेवा योजना ने किस तरह से उनके जीवन को बदल दिया है। एक ग्राहक मुश्ताक अहमद ने कहा कि इस योजना ने उन जैसे लोगों को बहुत राहत दी है।

उन्होंने कहा, दवाएं महंगी होती जा रही हैं, उनके दाम आसमान छू रहे हैं। लेकिन, इस केंद्र पर हमें बहुत रियायती दरों पर दवाएं मिल रही हैं। खास तौर पर गरीब और हाशिए पर रहने वाले परिवारों को इसका फायदा मिल रहा है। उन्होंने कहा, हम इस तरह की योजना शुरू करने के लिए प्रधानमंत्री नरेंद्र मोदी के बहुत आभारी हैं। अजीजुर रहमान बेग ने कहा, यह निचले तबके के लोगों के लिए बहुत ही उपयोगी योजना है। मैं दिल का मरीज हूं। जो दवा इस समय मेरे हाथ में है, उसकी कीमत मेडिकल स्टोर पर 100 रुपए है, लेकिन यहां मुझे यह 10 रुपए में मिल रही है।

The Shillong Times

June 04, 2025

## Residents in Dehradun reap benefits of Jan Aushadhi Kendra, express gratitude to Modi govt



**Dehradun,** May 4: The residents in Uttarakhand's Dehradun are reaping the benefits of the Pradhan Mantri Bhartiya Janaushadhi Pariyojana and have expressed their gratitude towards Prime Minister Narendra Modi-led Union government for implementing this welfare scheme 10 years ago.

The Jan Aushadhi Kendras launched under the Pradhan Mantri Bhartiya Janaushadhi Pariyojana have been instrumental in providing quality life-saving medicines and drugs at cheaper rates across the country.

The Pradhan Mantri Bharat Jan Aushadhi Kendra located in the Government Doon Medical College Hospital, Dehradun, is proving to be beneficial for the people belonging to low and middle income groups. It is run by the Indian Red Cross Society and helps in providing high quality generic medicines at much lower prices than private pharmacies across the city.



# SOCIAL MEDIA HIGHLIGHTS

(PMBJP Retweeted)





## PMBJK inauguration Insights



**Shri Brajesh Pathak**  
Hon'ble Deputy Chief Minister,  
Government of Uttar Pradesh inaugurated  
PMBJK  
Ram Sagar Mishra 100 Bed Combined Hospital  
Lucknow (Uttar Pradesh)



**Dr. Sanjay Jaiswal**  
Hon'ble Member of Parliament,  
Paschim Champaran, Gol inaugurated PMBJK  
Lohariya Chowk, Chanpatia,  
Pashchim Champaran (Bihar)



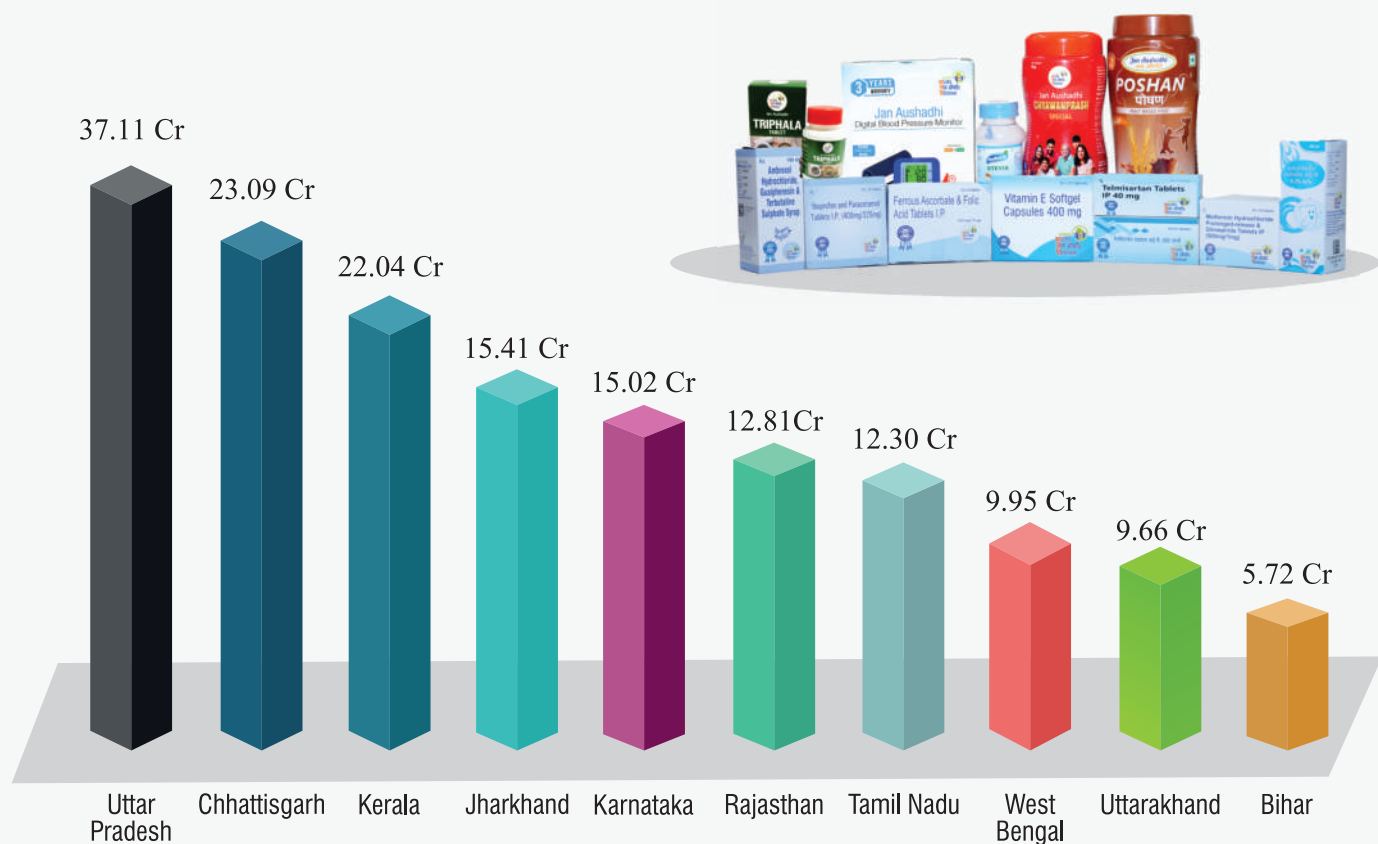
**Shri Neeraj Shekhar**  
Hon'ble Member of Parliament, Rajya Sabha,  
Gol inaugurated PMBJK  
Community Health Centre Barachawar  
Ghazipur, Uttar Pradesh



**Shri Rakesh Rathore Guru**  
Hon'ble Minister of State for Urban Development,  
Urban Employment & Poverty Alleviation,  
Govt. of Uttar Pradesh inaugurated PMBJK  
District Female Hospital  
Mahoba (Uttar Pradesh)

# Best Performing States in Terms of Sales in Rs. Crores

**MAY 2025**



## Welcoming new Partners who joined PMBI family in the month of May 2025

**PMBJK18331 - Challa Sujitha - D.No.25-2-912/1,2 Nd Street Sri Potti Sriramulu Nellore, Andhra Pradesh - 524004**

**PMBJK18049 - Rajani Kumari - Mohan Eghu, Word No. 41, Begusarai, Bihar - 851129**

**PMBJK18512 - Frenklin Ratre - Primary Health Center,Kasdol, Balodabazar-Bhatapara, Chhattisgarh- 493228**

**PMBJK18483 - Alka Sharma - Inside Rao Tula Ram Memorial Hospital, Dwarka, Delhi- 110073**

**PMBJK18323 - Kinjalben Sagarbhai Ode - GF, Shop No. 15, Near Gorwa Chhani Bridge, Gorwa, Vadodara, Gujarat - 390003**

**PMBJK18242- Pooja - Near Aggarwal Kiryana Store, Delhi Road, Kharkhoda, Sonipat, Haryana- 131402**

**PMBJK18158 - Rajeev Kumar- V.P.O. Bari Gumanu Tehsil Sadar, Mandi Sadar, Mandi, Himachal Pradesh - 175001**

**PMBJK18666 - Majid Hussian Shah - College Road Gagren Shopian, Shopian, Jammu And Kashmir- 192303**

**PMBJK18085 - Puspa Kunwar- Behind Noor Photo State, Chhatarpur, Palamu, Jharkhand - 822113**

**PMBJK18380 - Laxmi Radha - Near OPD, Taluka Hospital Premises, Shorapur, Yadgir, Karnataka- 585224**

**PMBJK18087 - Arathi Ajayan - Door No 2/373, Kannan Building, Kollam, Kerala- 691559**

**PMBJK18078 - Nirmala Bai - Shop No./ Plot No- 44, Savarkar Marg , Dewas, Madhya Pradesh- 455336**

**PMBJK18530 - Thongam Anand Singh - Opp. Police Station Imphal, Wangoi, Imphal West, Manipur- 795132**

**PMBJK18046 - Manasi Pati - Plot No.- 2394/13960, PO/PS- Rabania, Baleshwar, Odisha - 756033**

**PMBJK18130 - Tripta Devi - Shop No. 66, Near Bus Stand, Gharota, Pathankot, Punjab- 143533**

**PMBJK18325 - Lalita Godara - Community Health Centre Campus, Kanoota, Sujangarh, Churu, Rajasthan- 331507**

**PMBJK18548 - P Vijayalakshmi - Door No: 33C, Ground Floor, Sithaiyankottai, Athoor, Dindigul, Tamil Nadu- 624708**

**PMBJK18345- Uttam Saha - PS- Kakraban, Udaipur, Kakraban, Gomati, Tripura- 799105**

**PMBJK18008 - Rajesh Upadhyay - CHC Ramnagar Chitrakoot, Ramnagar, Chitrakoot, Uttar Pradesh- 210209**

**PMBJK18438 - Payel Saha - Dag No.-837, Mouza- Rupsona, Raina-I, Purba Bardhaman,West Bengal- 713421**





## Sickle Cell Disease:

Sickle cell disease (SCD) is a hereditary blood disorder characterized by the production of abnormal hemoglobin molecules that cause red blood cells to take on a crescent or sickle shape. This condition affects millions of people worldwide. SCD significantly impacts the health and quality of life of individuals affected by the disease. Therefore, understanding the causes, symptoms, and treatment options is essential for healthcare professionals, patients, and their families.

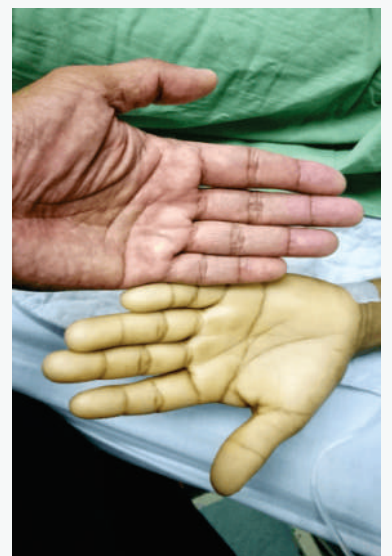
The primary cause of SCD is a mutation in the gene responsible for producing hemoglobin, this gene mutation produces abnormal hemoglobin which differs from normal adult hemoglobin in its molecular structure. This abnormal hemoglobin causes red blood cells to become stiff and sticky, resulting in their deformation and reduced ability to flow through small blood vessels. The altered shape of red blood cells contributes to various health complications associated with SCD.

The clinical symptoms of SCD are diverse and can vary in severity among individuals. The hallmark symptom is recurrent episodes of severe pain, which result from the obstruction of blood flow in small vessels by sickled red blood cells. Fatigue, anemia, and increased susceptibility to infections are also common symptoms of SCD. These manifestations can significantly impact the daily lives of individuals with SCD, affecting their physical and psychosocial well-being.

Treatment options for SCD aim to manage symptoms, prevent complications, and improve the quality of life for patients. Pain management is critical and often involves using analgesics, including opioids, nonsteroidal anti-inflammatory drugs, and adjuvant therapies. Adequate hydration, both orally and intravenously, is essential to maintain proper blood flow and prevent the sickling of red blood cells. In some instances, regular blood transfusions may be required to improve oxygen delivery to tissues and reduce the risk of complications such as stroke.

Furthermore, bone marrow or stem cell transplants can offer a potential cure for selective individuals with severe SCD, although this option is limited by donor availability and associated risks.

Understanding the causes, symptoms, and treatment options for SCD is crucial for healthcare professionals to provide accurate diagnosis, effective symptom management, and appropriate counselling for patients and their families.





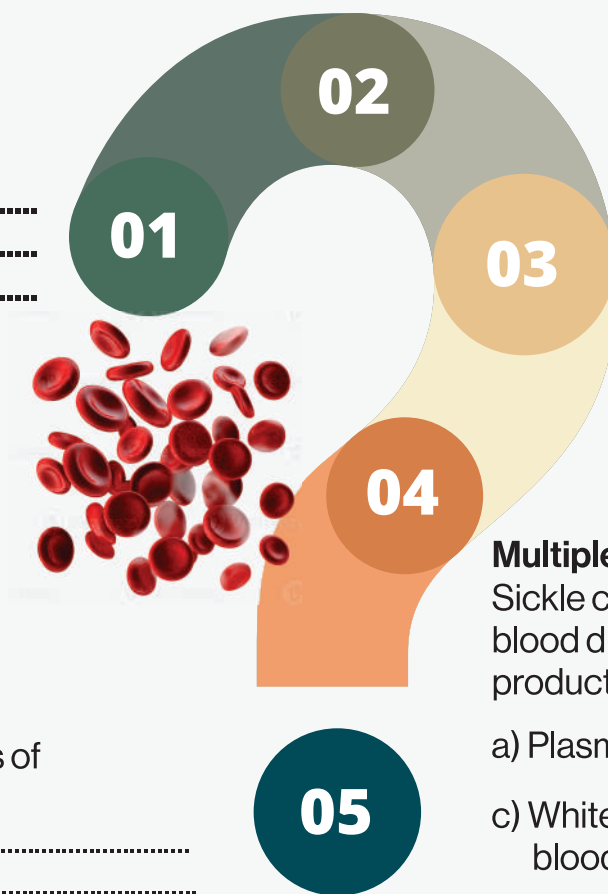
Fill in the puzzle below based on what you have read about  
**Sickle Cell Disease** on the previous page.

## Fill in the Blanks

Regular blood transfusions may be required in SCD to improve oxygen delivery to tissues and reduce the risk of complications such as \_\_\_\_\_.

What is  
Sickle Cell Disease

.....  
.....  
.....



## True or False

The primary cause of SCD is a mutation in the gene responsible for producing insulin.

True ☐ False ☐

## Multiple Choice

Sickle cell disease (SCD) is a hereditary blood disorder characterized by the production of abnormal molecules.

- a) Plasma ☐ b) Hemoglobin ☐  
c) White blood cell ☐ d) Platelet ☐

## Short Answer

List two symptoms of sickle cell disease.

1. ....  
2. ....