ANOTHER MILESTONE

Kozhikode is set to become home to India's first comprehensive Organ and Tissue Transplant Institute

SMILE OF WILL POWER

Chief Minister Pinarayi Vijayan stands proudly before the first Mothership San Fernando at Vizhinjam, marking a milestone in Kerala's journey towards becoming an International Trade Hub

Kerala's Healthcare Revolution

Kerala's steadfast commitment to healthcare excellence continues to set unparalleled standards, both within India and globally. Recently, a groundbreaking milestone has been achieved with the decision of establishing an Organ and Tissue Transplant Institute in Kozhikode. With an investment of ₹558.68 crores, this cutting-edge facility is poised to transform transplant care and research, positioning Kerala at the forefront of advanced medical interventions.

The Transplant Institute will offer a lifeline to patients with organ failure, providing an integrated approach from treatment and transplantation to rehabilitation. Leveraging advancements in regenerative medicine, tissue engineering, and stem cell therapy, the institute aims to deliver affordable and innovative healthcare solutions. Additionally, it will serve as a national hub for organ donation coordination and training, enhancing the expertise of healthcare professionals nationwide.

Kerala's robust primary healthcare system, bolstered by the Aardram Mission, exemplifies the state's holistic approach to health. The transformation of Primary Health Centres into Family Health Centres has improved accessibility, ensuring quality care for all citizens, regardless of socio-economic status. This inclusive model has effectively addressed non-communicable diseases and enhanced mental health services, setting a benchmark for comprehensive primary care.

The pivotal role of local self-governments in managing primary care services and addressing social determinants of health has been crucial to Kerala's remarkable health outcomes. Initiatives such as the Nava Kerala Karma Padhathi and Haritha Kerala Mission have further strengthened the health ecosystem through sustainable development and environmental conservation.

This issue also pays homage to the literary giant Vaikom Muhammad Basheer on his 30th death anniversary, honouring his significant contributions to Malayalam literature and culture.

Kerala's journey in healthcare epitomizes visionary policies, community engagement, and unwavering dedication. As the government continues to push the boundaries of medical excellence, the commitment remains to ensure every individual enjoys the highest standard of health, making Kerala a global exemplar of accessibility and inclusivity.

T.V. SUBHASH IAS
EDITOR

VIZHINJAM INTERNATIONAL SEAPORT
WELCOMING FIRST MOTHER VESSEL

12th JULY 2024, Friday, 10:00 AM

Inauguration by

Shri. Pinarayi Vijayan
(Hon'ble Chief Minister of Kerala)

In the presence of

Shri. Sarbananda Sonowal
(Hon'ble Union Minister for Ports, Shipping & Waterways)

Presided by

Shri. V. N. Vasavan
(Hon'ble Minister for Ports, Devaswom and Cooperation, Kerala)

August Presence

Shri. Karan Adani
(Managing Director, Adani Ports & SEZ)

Vizhinjam International Seaport
Thiruvananthapuram

Welcoming
First Mother Vessel

Vizhinjam's
Victorious Voyage
WELCOMING THE FIRST MOTHERSHIP

Victorious Voyage
WELCOMING THE FIRST MOTHER

56 Pages including Cover

NAVIGATOR

KERALA
NO.1

Kerala retained
top position in all the
SDG India Index 2023-24
editions published
by NITI Aayog

17 PARTNERSHIPS FOR THE GOALS
1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS

COMPREHENSIVE TRANSPLANT CENTRE

Veena George

Minister for Health and Woman and Child Development

Kozhikode is set to become home to India's first comprehensive Organ and Tissue Transplant Institute, featuring state-of-the-art facilities worth ₹558.68 crores, a groundbreaking project designed to revolutionise transplant care and research.

The construction of the Organ and Tissue Transplant Institute in Kozhikode is set to be completed on time, adhering to procedural guidelines. The state cabinet recently approved the establishment of this Transplant Institute with an expenditure of ₹558.68 crores through the Kerala Infrastructure Investment Fund Board (KIIFB). This institute aims to bring all activities related to organ donation under one roof, enabling comprehensive care ranging from treatment and transplantation surgeries to rehabilitation.

The institute will be located on a 20-acre campus in Chevayur, Kozhikode, and will consist of four blocks, each with six floors. It will feature a modern hospital facility with 510 beds, including 219 general beds, 42 special ward beds, 58 ICU beds, and 83 HDU beds. Additionally, the facility will have 16 operation rooms, a dialysis centre, and a transplant research centre. The first phase will include 330 beds and 10 operation theatres, while the second phase will add 180 beds and 6 operation theatres. There will be 14 specialty departments in the first phase and 7 more in the second phase. The institute will also place significant emphasis on education, aiming to start 31 academic courses.

Functions of the Institute of Organ Transplantation

1. Treatment: The number of patients with organ failure is steadily increasing, with only a small proportion finally receiving the needed organs. This gap is widening each year, necessitating significant efforts to address it. Establishing centres capable of managing large volumes of patients is crucial to reducing this disparity.

"This state-of-the-art institute will bridge the growing gap in organ transplantation with advanced facilities and a focus on large-scale patient management."

"With cutting-edge research, extensive training programs, and coordinated organ donation efforts, this institute is poised to set new standards in healthcare excellence."

2. Teaching and Training: Creating skilled manpower is essential for the expansion of transplant facilities, ensuring they are widely available to the public. This center will set standards for education and training in organ and tissue transplants, serving as a model for other states.

3. Research: Advanced areas in transplantation, such as regenerative medicine, tissue engineering, and stem cell research, have led to major breakthroughs in clinical transplants. A well-designed environment for translational research at this institute will yield affordable new drugs and innovative devices.

4. Deceased Organ Donation and National Network for Organ Sharing: Organized centres and systems through these institutions will help coordinate and expand organ sharing networks. This centre can act as the state coordinating hub.

Currently, organ transplant surgeries are conducted in government medical colleges in Thiruvananthapuram, Kottayam, and Kozhikode, as well as the Ernakulam General Hospital. To expand organ transplant surgeries and improve infrastructure in government hospitals, ₹2.20 crores were recently allocated. The government also formed K-SOTTO (Kerala State Organ and Tissue Transplant Organization) to coordinate organ donation activities. In addition to these initiatives, the Transplant Institute will serve as a model institution in this field, staffed with expert doctors, scientists, and health workers with specialized training.

SAVE A LIFE AFTERLIFE

N. Bhadran Nair
Executive Editor,
Indian Science Journal.

Save a life afterlife is one of the slogans promoting organ donation. At least 20 persons die in India every day waiting for an organ, while over three lakhs wait for donors. There is paucity of organ donations in the country, and according to Union Ministry of Health & Family Welfare, the number of donors was only 6,916 – both cadaver and live in 2014 which grew to 16,041 in 2022, which is about 10 percent of the total organ transplants worldwide. Organ transplantation is the best or only treatment for end-stage organ failure, though it can be challenging and complex.

Kerala boasts of the best health statistics in India and some of it is comparable to those in the developed countries. Kerala had established an online registry for patients waiting for organ transplants in the state. The registry has recorded 968 major organ transplants since the establishment of Deceased Donor Organ Transplantation Programme, in August 2012 to January 2023. It aims at giving vulnerable patients a chance to transplant organs and lead a healthy life. This has streamlined the procedures for organ transplant and address ethical issues involved in live and cadaver organ transplantation.

The move by the state government now to set up an exclusive hospital for organ transplantation is an effort to increase the available facilities to meet the growing demands for such procedures. The Institute of Organ & Tissue Transplant, being set up in Kozhikode, will be the first state-run exclusive super speciality facility in the country for organ transplant. This facility is also expected to end exploitation of organ transplant seekers from unscrupulous traders of organs and hospitals indulging in such unethical practices. The Rs. 559 crore project would bring in the latest technology for transplant and post-transplant complications.

Most of the organ transplantation in Kerala is carried out in private hospitals as elsewhere in India, barring six government entities – five medical colleges at Thiruvananthapuram, Alappuzha, Kottayam, Kozhikode, and Kannur and Sree Chithira Institute of Medical Sciences, Thiruvananthapuram. The procedures in private sector make it unaffordable to most patients, while the demand for donors is high against poor availability. Despite government efforts to promote deceased organ transplantation, the results are suboptimal due to a multitude of factors such as religious and cultural beliefs, healthcare system experiences.

"The ups and downs of organ donation is directly related to what comes in the social media, either positively or negatively," said Dr. Subramanian Iyer, Professor and Head of the Department, Head & Neck Surgery at Amrita Institute of Medical Sciences, Kochi.

"Unfortunately, negative publicity percolates down quicker than positive ones. This has been one of the main reasons for the slow progress of organ donations in Kerala. At one time, we were in the forefront. But again, negative social activism comes in the way of organ donations in the state," added Dr. Iyer, who pioneered twin hand transplant in India.

Dr Iyer lauded the regulatory mechanism in Kerala for the improved organ donation and transplant situation compared to many other states. "The cadaver organ transplants have been transparent from the very beginning and private hospitals have fully been in tune with the regulatory controls of the government," commented Dr. Subramanian Iyer.

Out of 968 transplants in the state during August 2012 to January 2023, more than 88 per cent were kidney and liver transplants. Kidney transplants are being done mainly in government facilities, which helps poor people, whereas liver transplants are limited to private centres, as government facilities have not taken it up earnestly, which is a real handicap for the poor patients.

Kidney transplant has been standardised in all government medical colleges and the new centre will certainly increase the available facilities for such transplants in the state, which are in high demand. Additionally other organ transplants like heart, lung, uterus and hand transplant will also get a boost, if these specialisations are introduced in the upcoming centre.

Transplantation in India has come a long way, since the first successful organ transplant at Christian Medical College, Vellore, Tamil Nadu in 1971. While India's transplant journey has been promising in these decades, the country's performance in comparison with many other countries was dismal. The large disease burden and people living with chronic diseases across different financial strata of the society makes accessibility and availability of organs a big challenge to a majority. According to a report, about three lakh patients wait for organ donation in India, and availability of organs has not kept pace with demand.

While there is need to create greater awareness among medical professionals and societies on how one deceased donor can save several lives. As Dr. Subramanian Iyer put it, the first twin hand transplant at Amrita Hospital brought the focus and awareness about organ donation in the public domain. More importantly, the transplant recipients have also acted as ambassadors of organ donation in the society because they are all considered being unique recipients.

From Robotic Surgery to Artificial Intelligence

Cutting-Edge Health Initiatives Redfine Healthsector in the State

Staff Reporter

Kerala is setting new benchmarks with the introduction of state-of-the-art medical technologies and innovative health initiatives. From pioneering robotic surgery and artificial intelligence integration to advanced blood bag traceability systems and comprehensive cancer care, the state is revolutionising its healthcare landscape. This extensive transformation aims not only to provide world-class treatment but also to make high-quality healthcare accessible and affordable for all, ensuring a healthier future for its citizens.

Kerala Chief Minister Sri. Pinarayi Vijayan inaugurated Robotic Surgery unit in RCC

Robotic Surgery in Government Hospitals

- **Budget:** ₹60 Crores
- **Launch:** Robotic surgery for cancer treatment has commenced at RCC and MCC, marking a first in the government sector.
- **Thiruvananthapuram Medical College:** Allocated ₹29 Crores for robotic surgery facilities.

Artificial Intelligence in Healthcare

- **Pioneering AI Integration:** Thiruvananthapuram General Hospital will be the first district-level hospital in India to install G Gaiter.
- **Neuro-Rehabilitation:** Leveraging AI to provide world-class, modern neuro-rehabilitation treatment.
- **Robotic Assistance:** Advanced robotic technology aids patients in regaining mobility and walking, addressing conditions

Mammogram

caused by stroke, spinal cord injuries, accidents, and Parkinson's disease.

Blood Bag Traceability System

- **Advanced Monitoring:** Implemented a cutting-edge blood bag traceability system to monitor the journey of blood from collection to transfusion.
- **Implementation:** This system is being rolled out across 42 government blood banks and 57 blood storage centres in the state.

Mammogram Breast Cancer Screening

- **Early Detection:** Mammogram facilities for early breast cancer detection are being introduced at district and taluk hospitals.
- **Comprehensive Cancer Plan:** A holistic plan for cancer prevention and treatment.
- **Initial Investment:** ₹2.4 Crores

allocated for the first phase, covering 8 hospitals.

Liver Transplant Surgery

- **Affordable Transplants:** Liver transplant surgeries, which typically cost around ₹50 Lakhs, are now available either free of charge or at subsidized rates in the government sector.
- **Successful Surgeries:** All procedures have been successful at Kottayam Medical College and Thiruvananthapuram Medical College.

Pioneering Achievements

- **First in the Country:** Ernakulam General Hospital became the first district-level hospital in India to successfully perform kidney transplant surgery.
- **Cardiac Surgery Milestones:** Ernakulam General Hospital also became the first district-level

Blood bag

Ernakulam General Hospital

hospital in India to conduct both open-heart surgeries and valve replacement surgeries without opening the heart.

- **Advanced Stroke Centre:** Thiruvananthapuram Medical College has established a ₹14.3 Crore comprehensive stroke centre, featuring the country's first neuro Cath lab in the government sector. It is the nation's first complete stroke centre for advanced stroke treatment.

Realising 'Digital Health'

- **E-Office Implementation:** The Directorate of Health Services has transitioned to an e-office system.
- **District Medical Offices:** E-office systems are being implemented in district medical offices.
- **E-Health Initiative:** E-health services have been introduced in 609 health institutions, including 402 hospitals during the current

G Gaiter

administration.

- **Online OP Tickets:** Online outpatient tickets have been made a reality.
- **Paperless Hospital Services:** Hospital services have been digitized to eliminate the use of paper.
- **Shaili App for Lifestyle Disease Diagnosis:** Through the Ardra public campaign, health workers screened 1.54 crore individuals at their homes using the Shaili app, ensuring health through minimal effort.
- **Cancer Care Coordination:** The Cancer Grid and Cancer Care Suite have been implemented to streamline cancer diagnosis and treatment.
- **Expanded E-Sanjeevani Service:** The e-Sanjeevani telemedicine service has been significantly expanded.
- **SMS Lab Results:** A system to receive lab results via SMS has been established.

Ardram public campaign

Thiruvananthapuram General Hospital

New Milestone in Lifestyle Disease Diagnosis

- **Ardram Public Campaign:** Health workers conducted screenings for approximately 1.55 crore individuals at their homes through the Ardram public campaign.
- **Second Phase Initiation:** The second phase of the Ardram lifestyle disease diagnosis screening has commenced.

Kerala's cutting-edge health initiatives underscore a bold commitment to enhancing the quality of medical care and harnessing technology for better patient outcomes. By investing in advanced medical facilities, integrating artificial intelligence, and launching innovative public health campaigns, Kerala is not only addressing current healthcare challenges but also leading the way in delivering compassionate, efficient, and technologically advanced healthcare to its people.

Kerala's Ambitious Medical College Revamp

Staff Reporter

In a bold move to revolutionise healthcare services, the government has launched a comprehensive Quality Improvement Initiative aimed at elevating the standards of its medical colleges. Building on the remarkable success at Thiruvananthapuram Medical College, the initiative is set to extend its reach to government medical colleges in Alappuzha, Kottayam, Ernakulam, Thrissur, and Kozhikode. The project promises timely and specialised treatment for patients in emergency departments, marking a significant leap forward in public health service delivery.

Thiruvananthapuram Medical College
A Benchmark of Excellence

Thiruvananthapuram Medical College has made history by securing a place on the national ranking list, a first for both the Medical College and its Dental College. This achievement underscores the institution's commitment to excellence and innovation.

- **New Teaching Positions:** The creation of 25 new teaching positions promises to enhance the quality of education and patient care.

- **Specialised Departments:** The establishment of departments in Critical Care, Genetics, Geriatrics, Interventional Radiology, and Rheumatology, staffed with top-notch professionals, reflects a significant upgrade in specialised medical services.

- **Pediatric Cardiology:** The Pediatric Cardiology Department at S.A.T. Hospital now features an advanced cardiac surgery unit, significantly enhancing pediatric healthcare.

- **Center of Excellence:** The S.A.T. Hospital has been elevated to a Center of Excellence, marking a milestone in quality healthcare delivery.

- **Emergency Medicine:** New PG courses in Emergency Medicine have been initiated, supported by the creation of three PG seats.

- **Comprehensive Stroke Center:** The country's first comprehensive stroke center in the government sector, complete with a Neuro Cath Lab, has been established.

- **Advanced Facilities:** The inauguration of an advanced emergency department, installation of a LINAC device for advanced cancer radiation therapy, and the launch of a Pediatric Gastroenterology Department are among the many advancements. A Burns ICU have been established.

- **Infrastructure:** The construction of a women's hostel worth ₹23 crores, a special block with 100 ICU beds, and the successful completion of liver transplant surgeries highlight the extensive infrastructural improvements.

Kollam Medical College
A Hub of Advanced Learning and Care

Kollam Medical College has emerged as a centre of academic excellence and advanced medical care.

- **PG Courses and Nursing College:** The initiation of PG courses and the establishment of a nursing college mark significant milestones in medical education.
- **Cath Lab:** The operationalisation of the Cath Lab provides critical diagnostic and treatment services, enhancing patient care capabilities.

Konni Medical College
A Pillar of Development

Konni Medical College is undergoing a massive transformation with a development project worth ₹250 crores.

- **MBBS Course and Infrastructure:** The introduction of an MBBS course with 100 seats and the construction of new administration and academic blocks highlight the college's growth.
- **Advanced Facilities:** The installation of the district's first advanced 128-slice CT scan, operational OP, IP, emergency departments, and the Pediatric ICU signify major advancements in healthcare services.
- **Lakshya Scheme:** The renovation of the labour room under the Lakshya scheme and the establishment of new hostels and a blood bank reflect a comprehensive upgrade.

Alappuzha Medical College
Leading in Super Specialties

Alappuzha Medical College has set a new standard with its super specialty block, realised with an investment of ₹173 crores.

- **Super Specialty and ICU Beds:** The block includes 200 super specialty beds and 50 ICU beds, ensuring top-tier healthcare services.
- **Mother and Child Hospital:** The establishment of a mother and child hospital worth ₹30 crores further underscores the focus on maternal and child health.

Kottayam Medical College
Pioneering Medical Advancements

Kottayam Medical College stands out with its A+ grade from the Health University, signifying excellence in medical education and services.

- **Liver and Valve Surgeries:** The successful performance of Kerala's first liver transplant and valve replacement surgeries without opening the heart are groundbreaking achievements.

- **Infectious Disease Course:** The launch of the first DM Infectious Disease course in a government medical college in India and the approval for a fellowship program in Gastrointestinal and HPB Surgery are major educational milestones.

- **Super Specialty Block:** The establishment of a super specialty block worth ₹268 crores and a dedicated block for the Infectious Disease Department highlight significant infrastructural developments.

- **Cardiology and Surgical Blocks:** The rapid progress in constructing the Cardiology Block and the nearing completion of the Surgical Block emphasise the college's continuous growth.

- **Pharmacy College:** The realisation of a new building for the Pharmacy College worth ₹27 crores is a testament to the institution's commitment to expanding its educational infrastructure.

61-year-old's heart valve replaced by KottayamMedical college without opening heart

Second successful liver transplant in govt hospital, pride moment for Kottayam Medical College

Idukki Medical College
Expanding Services and Infrastructure

Idukki Medical College has made substantial strides in service delivery and infrastructure development.

- **New Building and IP Services:** The completion of a new building and the start of IP services mark significant advancements.
- **Nursing College:** The establishment of a nursing college and the operational OP block reflect a commitment to enhancing medical education and patient care.

Ernakulam Medical College
A Maternal and Child Health Pioneer

Ernakulam Medical College at Kalamassery has seen notable developments with the establishment of a maternal and child super specialty block worth ₹285 crores.

- **Emergency and Critical Care Block:** The establishment of this block and the completion of 36 projects worth ₹17 crores highlight substantial progress.

- **Endobronchial Ultrasound:** The introduction of endobronchial ultrasound for the first time signifies advancements in diagnostic capabilities.

- **PG Seats:** Out of the recently approved 43 PG seats, 15 have been granted to Ernakulam Medical College, underscoring the institution's growth in postgraduate education.

Thrissur Medical College
Advancing Medical Technology and Education

Thrissur Medical College has made significant strides in introducing new services and upgrading its infrastructure.

- **MRI Scanning and Aesthetic Dermatology:** The installation of an MRI scanning machine worth ₹6.91 crores and the establishment of an Aesthetic Dermatology Suite enhance diagnostic and treatment capabilities.

- **Neonatology and CVI Clinic:** The launch of departments for Neonatology and CVI Clinic, along with a digital radiography system, reflects comprehensive service improvements.

- **Trauma Care and Central Library:** The realisation of a trauma care triage system and substantial funds allocated for the construction of a central library cum auditorium highlight infrastructural growth.

Burns Treatment Unit   *Tele Cobal Machine*

Manjeri Medical College
Enhancing Emergency and Specialised Services

Manjeri Medical College has enhanced its educational and medical services, focusing on emergency care and specialised services.

- **PG Courses and Nursing College:** The initiation of PG courses and the establishment of a nursing college mark significant advancements.
- **Renovations and Enhancements:** The renovation of the casualty department and enhancements in ICU facilities reflect a commitment to improving patient care.

Construction of critical care block at Govt.Medical College, Manjeri

Kozhikode Medical College
A Hub of Specialty Services

Kozhikode Medical College has achieved remarkable progress with the establishment of a surgical super specialty block worth ₹195 crores.

- **Neonatology and PET Scan:** The introduction of a neonatology department and the installation of a PET scan enhance the college's service offerings.
- **Mother-Newborn Care Unit:** The establishment of the state's first mother-newborn care unit underscores a focus on maternal and child health.
- **Liver Transplants:** Preparations for liver transplant surgeries and the initiation of super specialty PG courses in surgical gastroenterology highlight significant advancements.

Mother-Newborn Care Unit   *Neonatology and PET Scan*

Kannur Medical College
Building a Strong Healthcare Foundation

Kannur Medical College has regularised its workforce and introduced new departments and services.

- **Plastic Surgery and Hostels:** The introduction of a plastic surgery department and the allocation of ₹50.87 crores for hostel construction mark significant developments.
- **Renovations and Trauma Care:** Ongoing renovation activities and the construction of trauma care facilities reflect a commitment to comprehensive healthcare improvements.

Plastic Surgery

Kasaragod Medical College
Expanding Specialty Services

Kasaragod Medical College has initiated OP services and provided specialty treatments, significantly enhancing healthcare delivery.

- **Neurology and Infrastructure:** The introduction of neurology services and substantial funds allocated for hospital block completion reflect significant progress.
- **Specialty Services:** The phased introduction of specialty services and ongoing construction of hostels underscore the college's growth.

Palakkad Medical College
Rising to Excellence

- The inpatient (IP) department of the only medical college functioning under the Scheduled Castes Development Department, Palakkad Government Medical College, was inaugurated by the Chief Ministe Pinarayi Vijayan on 12/03/2024.
- All outpatient departments, except the gynaecology department, are equipped with modern facilities at the medical college hospital.
- Approval has been received to start postgraduate courses in Pharmacology, Microbiology, Community Medicine, and Pathology departments.

Wayanad Medical College
Innovating in Specialty Care

Wayanad Medical College has made notable advancements in specialty services.

- **Cath Lab and Multi-Specialty Building:** The realisation of a cath lab and a multi-specialty building signify major healthcare improvements.
- **Hip Replacement Surgery:** The successful performance of a hip replacement surgery for a sickle cell patient showcases the college's surgical capabilities.

ACCOLADES AND HONOURS

1. **Central Government Awards:** Received for three consecutive years for providing the most free treatments.

2. **TB Eradication Efforts:** Recognized as the best-coordinated state in 2022 and 2023.

3. **International Recognition for Hemophilia Data Collection and Coordination.**

4. **Special Arogya Manthan Award 2023:** For services designed for the visually impaired.

5. **Full Utilisation of Allocated Funds:** Recognised for effective budget management.

6. **Award for Maximum Beds Empanelled for Beneficiaries.**

7. **State with Over 90% Families Having at Least One Ayushman Card.**

8. **National Digital Transformation Award for the State Aswasdara Project.**

9. **First Place in the National Food Security Index.**

10. **Second Place in the National Food Security Index (2021).**

11. **National Healthcare Award for Kerala's Health Security Program.**

12. **India Today 2022 Award:** For the best-performing state in health.

13. **National Award for Best Performing State in Reducing Maternal Mortality.**

14. **Highest Number of NQAS Accreditations in 2021.**

15. **First Place for Urban Primary Health Centres with NQAS Accreditation at National Level.**

16. **Second Place for Primary Health Centres with NQAS Accreditation at National Level.**

17. **India Today's 'Healthgiri' Award.**

18. **Governance Now's Digital Transformation Award for E-Sanjeevani and Karunya Benevolent Fund Projects.**

19. **National Award for the Best Channelizing Agency for Women Development Corporation.**

20. **National Awards for Four Cities in the State in the FSSAI's Eat Right Challenge.**

21. **National Award for the Best Channelizing Agency for Women Development Corporation by the National Minority Finance Development Corporation.**

22. **National Recognition for the Vanamithra Project.**

23. **Kottayam Medical College:** Awarded for providing the most free treatments in the country.

24. **Trivandrum Medical College:** Recognised as the hospital performing the highest number of cardiology interventions nationally.

These awards not only highlight the department's exceptional efforts and achievements but also set a benchmark for other states and organisations to follow.

A New Era in Kerala's Medical Education

Dr. Thomas Mathew
Director of Medical Education

Kerala's advancements in medical education and healthcare infrastructure mark a transformative era, showcasing its unwavering commitment to excellence and accessibility in healthcare.

Kerala has always been a pioneer in healthcare, but recent strides have taken its medical education to new heights. Thiruvananthapuram Medical College and Dental College have made their debut on the national ranking list, a significant milestone showcasing the state's commitment to excellence in healthcare education.Seven students from Government Medical Colleges across Kerala have clinched gold medals in the prestigious All India Medical Science Examination conducted by the National Board of Examinations in 2024. This achievement testifies to the high quality of medical education provided by the department

The previous and the current government has approved 53 super specialty PG seats 190 new medical PG seats and 555 MBBS seats, reflecting its dedication to fostering advanced medical training. This expansion allows for a greater number of specialised doctors who can cater to the diverse medical needs of the state. Additionally, this year saw the addition of 1020 B.Sc. Nursing seats, a major boost for nursing education, ensuring that more students have the opportunity to pursue a career in this vital field.

Investments in Critical Care and Infrastructure

To enhance critical care facilities, ₹4.44 crores have been allocated to five medical colleges. This funding is essential for improving the quality of care provided to patients with severe health conditions. Significant investments have also been made to establish isolation blocks at Thiruvananthapuram (₹34.74 crores) and Kozhikode (₹34.92 crores) Medical Colleges. These facilities are crucial for managing infectious diseases and ensuring the state is prepared for future healthcare emergencies.

Emergency Care Services

A significant paradigm shift has occurred in medical education with the transition from traditional casualty concepts to the establishment of Emergency Medicine departments. These new departments have been integrated into medical education institutions, offering postgraduate courses specifically focused on trauma care and other medical emergencies.Infrastructure upgradation, essential equipment installations, new post creation, effective triage implementation have been the focus areas. The health care professionals in

the emergency departments are being given advanced training in trauma care through the Apex Trauma and Emergency Learning Centre, Trivandrum for ensuring the quality of care. This development ensures that healthcare professionals are well-trained to handle a wide range of urgent medical situations, thereby enhancing the quality and responsiveness of emergency care.

Enhancing Rural Healthcare

Kerala was the first state in the country to implement District Residency Program which is aimed at providing specialty care in the Primary and Secondary Level care institutions. Rural healthcare has received a substantial boost with the availability of PG doctors' services in remote areas. This initiative ensures that specialized medical care reaches even the most isolated communities, addressing a long-standing gap in healthcare access. The establishment of eight new government nursing colleges and seven nursing colleges under CIMET further supports this goal by training more healthcare professionals who can serve in rural areas.

Specialised Medical Services

The Centre of Excellence for Rare Diseases at SAT Hospital in Trivandrum offers diagnosis and treatment for various genetic conditions. This facility is one of eleven Centres of Excellence established to enhance specialized medical services for rare genetic diseases, including spinal muscular atrophy and others. Additionally, the center will soon start postgraduate courses in genetics, further advancing specialized medical education and research in this field.

Burns units have been set up in medical colleges, providing specialized care for burn patients. These units are equipped with the latest technology and staffed by trained professionals, ensuring that patients receive the best possible treatment. Additionally, Thiruvananthapuram, Alappuzha, and Ernakulam have launched M.Sc. Mental Health Nursing courses, addressing the increasing need for mental health professionals. This move is crucial in a time when mental health issues are on the rise and require dedicated care and attention.

Promoting Inclusivity

In a progressive move, reservation has been granted

for transgender individuals in the nursing sector. This initiative promotes inclusivity and diversity within the healthcare workforce, ensuring that all segments of society have the opportunity to contribute to and benefit from the healthcare system.

Strengthening Medical Education

The state has created 270 new posts in the medical education sector by the end of December. This is the largest number of medical teaching positions ever established at one time, underscoring the government's commitment to strengthening medical education. New departments in Critical Care, Genetics, Geriatrics, Interventional Radiology, and Rheumatology have been established for the first time, ensuring that Kerala remains at the forefront of specialized healthcare education.

\Super Specialty Departments

Forty-two super specialty departments have been introduced across various medical colleges, providing cutting-edge medical services and training. These departments offer advanced medical care and serve as training grounds for future specialists, ensuring that the state's healthcare system remains robust and

capable of handling complex medical cases. New PG seats and super specialty services have been launched in Manjeri and Kollam, further decentralizing advanced medical education and care.

Advanced Medical Procedures

Thiruvananthapuram and Kottayam have commenced liver transplantation surgeries, marking a significant advancement in the state's medical capabilities. These procedures require highly specialized skills and equipment, and their introduction is a testament to the state's growing medical expertise.

These comprehensive initiatives represent a forward-thinking approach to healthcare and medical education in Kerala. By enhancing its healthcare infrastructure and expanding educational opportunities, Kerala is ensuring that quality medical and nursing education is accessible to a broader segment of the population. These developments pave the way for a healthier, more educated society, setting a benchmark for the rest of the country. Kerala's commitment to excellence in healthcare is evident in these strides, promising a bright future for its medical and nursing education.
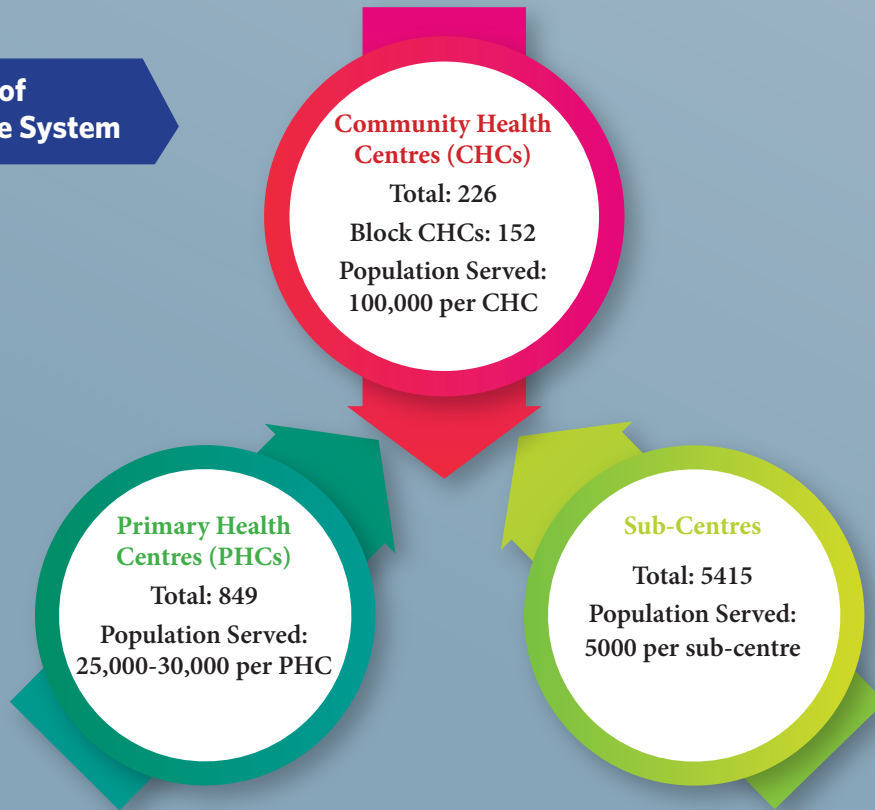
A Global Model of Accessibility and Inclusivity

Dr P. K. Jameela
Expert Member
State Planning Board

Kerala's primary health care system stands as a paragon of accessibility and inclusivity, providing comprehensive care to all its citizens while addressing the unique health challenges of the state.

Community Health Centres (CHCs)

Total: 226

Block CHCs: 152

Population Served: 100,000 per CHC

Primary Health Centres (PHCs)

Total: 849

Population Served: 25,000-30,000 per PHC

Sub-Centres

Total: 5415

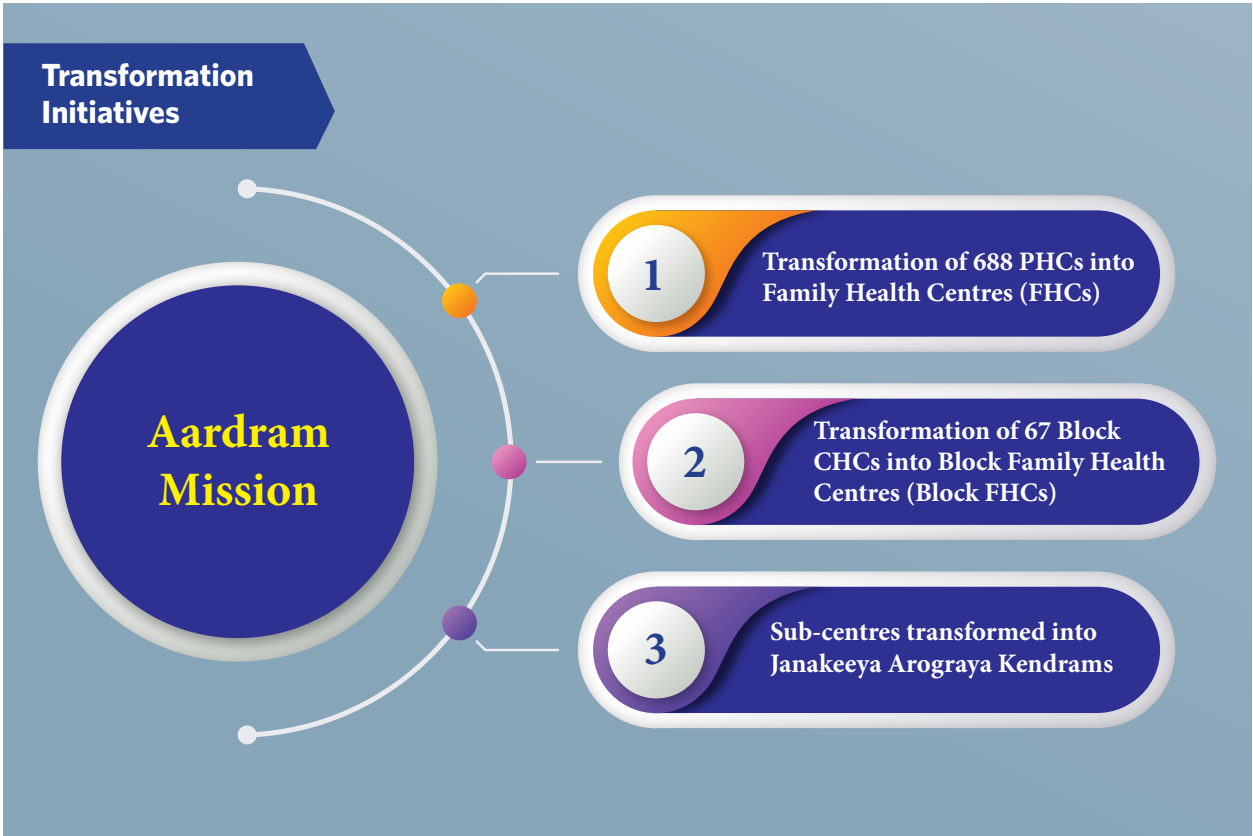Population Served: 5000 per sub-centre

The Alma-Ata International Conference held in Kazakhstan in 1978 defined primary health care as "essential healthcare made universally accessible to individuals and acceptable to them, through their full participation and at a cost the community could afford." "Good health and wellbeing" is one of the goals of Sustainable Development 2030. The second global conference on primary health care was in October 2018 in Astana, Kazakhstan. This conference again endorsed the critical role of primary health care in promoting good health, social and economic development, and global security.

Health is considered a fundamental human right. Everyone, everywhere, should be able to enjoy the highest possible attainable standard of health. Our state is committed to meeting all people's health needs across the life course through

"With the introduction of the Aardram Mission, which aims at the people-friendly transformation of all healthcare institutions, the transformation of Primary Health Centres to Family Health Centres and the improvement in the quality of care, the state has achieved a unique position in the health sector and is a role model for the entire country."

comprehensive primary care, which includes preventive, promotive, curative, rehabilitative, and palliative care. The health indicators of Kerala have always been the best compared to the rest of India and also at par with the developed countries of the world. With the introduction of the Aardram Mission, which aims at the people-friendly transformation of all healthcare institutions, the transformation of Primary Health Centres to Family Health Centres, and the improvement in the quality of care, the state has achieved a unique position in the health sector and is a role model for the entire country.

Primary Health Care in Kerala

The state has a long history of efficient primary care. Ayurveda was the popular system here before the introduction of modern medicine by Europeans. By 1900, the concept

Transformation Initiatives

Aardram Mission

1. Transformation of 688 PHCs into Family Health Centres (FHCs)

2. Transformation of 67 Block CHCs into Block Family Health Centres (Block FHCs)

3. Sub-centres transformed into Janakeeya Arograya Kendrams

of primary care started in rural areas. With the formation of Kerala in 1956 and the establishment of the Department of Health Services, public health gained momentum, and primary health care services were strengthened through a robust primary care system. Parallel initiatives of the state, like the provision of safe drinking water, free primary education including education for women, the public distribution system, and land reforms, supported the health system.
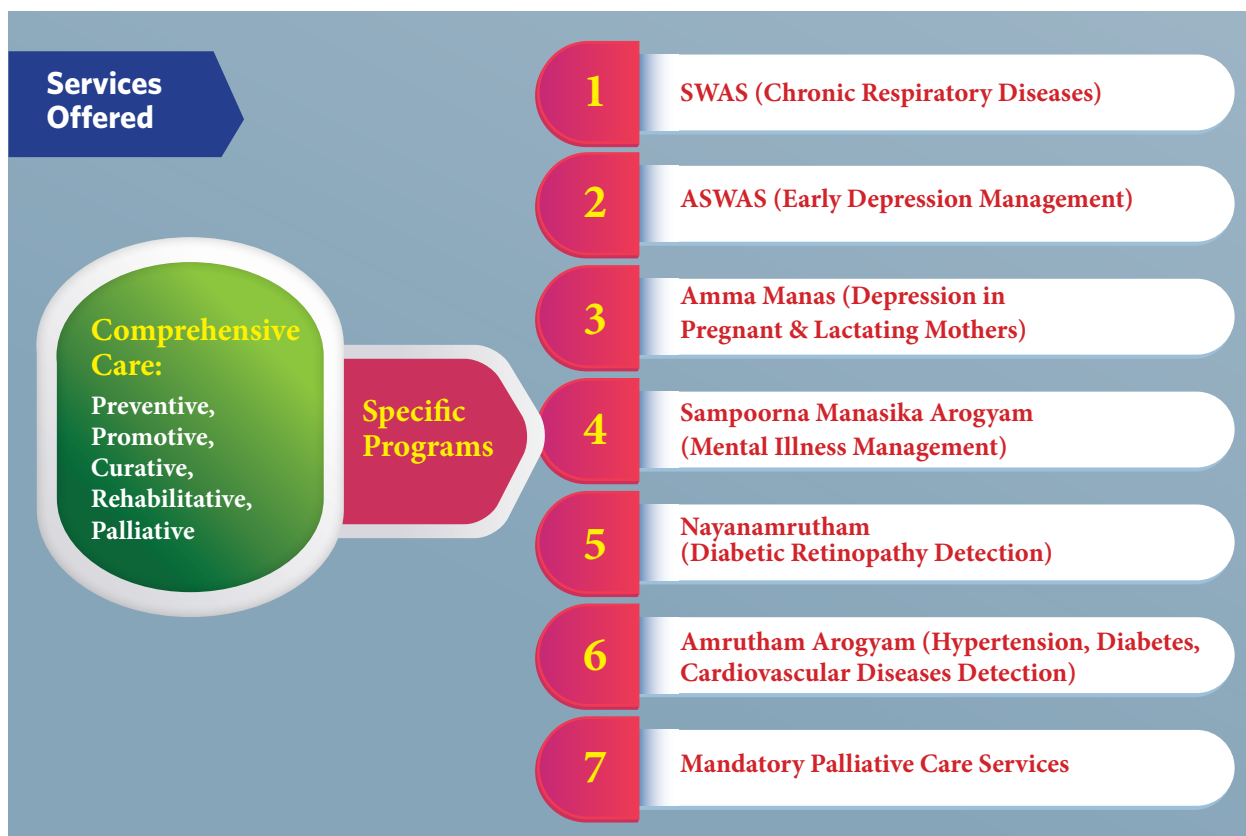
The primary health care system in the state consists of 226 Community Health Centres (CHCs), of which 152 are Block Community Health Centres (Block CHCs), 849 Primary Health Centres (PHCs), and 5415 sub-centres. Each CHC serves roughly 1 lakh population under which there are PHCs serving a population of 25,000-30,000. Under each PHC, we have sub-centres that

"Kerala's model of primary health care is hundred percent people-friendly, addressing all sections of society, accessible and affordable to all irrespective of their status, with special attention to the marginalized population, thereby reducing out-of-pocket expenditure on health and achieving the Sustainable Development Goal."

serve 5,000 people. Since the launch of the Aardram Mission, 688 PHCs have been transformed into Family Health Centres (FHCs) and 67 Block CHCs into Block Family Health Centres (Block FHCs), and all sub-centres into Janakeeya Arograya Kendrams. Apart from this, there are urban PHCs under the National Health Mission to deliver primary care services to the urban poor.

Health System Challenges in Primary Care

The major threat in the health sector as well as primary care is the huge burden of non-communicable diseases (NCDs) or lifestyle diseases. There is an increasing trend in newly detected cases of hypertension, diabetes, cardiovascular diseases, cancer, and lung diseases. The study conducted in the state by Achutha Menon Centre for Health Sciences, Thiruvananthapuram in

Services Offered		
	1	**SWAS (Chronic Respiratory Diseases)**
	2	**ASWAS (Early Depression Management)**
	3	**Amma Manas (Depression in Pregnant & Lactating Mothers)**
Comprehensive Care: Preventive, Promotive, Curative, Rehabilitative, Palliative → **Specific Programs**	4	**Sampoorna Manasika Arogyam (Mental Illness Management)**
	5	**Nayanamrutham (Diabetic Retinopathy Detection)**
	6	**Amrutham Arogyam (Hypertension, Diabetes, Cardiovascular Diseases Detection)**
	7	**Mandatory Palliative Care Services**

2016-17 reveals that one out of three has hypertension and one out of five has diabetes in our state. Even though the state has witnessed a steep decrease in the use of tobacco, there is an increasing affinity to alcohol, and the age of first use of alcohol has come down. The unhealthy dietary practices, lack of physical exercise in all sections of the population irrespective of age and economic status, and the aging population have contributed to the rise in lifestyle diseases. It is estimated that 52% of total deaths in the productive age group between 30 and 70 years of age is due to non-communicable diseases. Kerala also reports higher levels of mental illness compared to the all-India average. Increasing numbers of suicides and alcoholism are concerns in the state. As per the National Family Health Survey-5 (NFHS-5) done between 2019-2021, there has been an increase in the prevalence of anemia among women and children when compared to NFHS-4 (2015-16).

Although the state has been successful in controlling a number of communicable diseases, emerging and re-emerging communicable diseases in recent years have led to considerable morbidity and mortality. Vector-borne, water-borne, air-borne, and zoonotic diseases are reported from all districts. Dengue fever, leptospirosis, H1N1, hepatitis, malaria, and Japanese encephalitis are the leading causes of mortality among communicable diseases.

In the health sector, special attention has to be given to the vulnerable population like tribal, coastal, migrants, urban slum dwellers, older citizens, women and children, transgenders, and people with disabilities in terms of services and accessibility.

Exploitation of natural resources, environmental degradation, water quality issues, climate changes, road traffic accidents, etc. are also considered public health threats.

Re-engineering Primary Care

To address the challenges in the health sector through primary health care services, as part of the Nava Kerala Karma Padhathi, the state has introduced a mission named the Aardram Mission. Under the leadership of local self-governments, ensuring people's participation and technical support from the health department, the mission develops the appropriate plan to tackle each and every health issue faced by the people. Other missions of Nava Kerala Karma Padhathi, namely Haritha Kerala Mission, Life Mission, and Vidya Kiranam, are closely related to the Aardram Mission since their activities indirectly improve the overall

Janakeeya Arogya Kendrams

Enhanced Sub-Centres:
- 4558 centres with a qualified nurse (MLHP) through NHM
- Junior Public Health Nurses & Junior Health Inspectors
- Coordination with ASHA workers, Anganwadi workers, health volunteers

Service Packages:
- Clinics for antenatal mothers, vaccination, adolescents, elderly, NCD, smoking cessation

health of the people.

The primary care system has undergone a silent revolution in the state through its people-friendly transformation of PHCs and CHCs to FHCs/Block FHCs. There are significant changes in the services in terms of quality and quantity. All FHCs are provided with three medical officers, four staff nurses, a laboratory technician, pharmacists, along with the ministerial and field staff. The working time has been extended to 6 pm. Standards are laid down for infrastructure, human resources, and functioning, especially outpatient services, nursing care, pharmacy, and laboratory. Duties and responsibilities of all staff are redefined. Management guidelines, including referral protocols, are developed for the disease conditions that can be approached at the primary care level. The supply chain of medicines, vaccines, and consumables is maintained. Infrastructure is designed to suit the needs of women, children, the elderly, and people with disabilities.

To address the challenges of non-communicable diseases at the primary level, innovative programs are introduced. To mention a few of them are the "SWAS" program to manage chronic respiratory diseases, the 'ASWAS' program to tackle depression in the early stages, "Amma Manas" to manage depression among pregnant and lactating mothers, Sampoorna Manasika Arogyam to manage all types of mental illnesses, Nayanamrutham to detect diabetic retinopathy, and Amrutham Arogyam to detect hypertension, diabetes, and cardiovascular diseases. Palliative care services are mandatory in all FHCs. Proper follow-up, counseling services, and maintenance of medical records through the e-health system are also available in FHCs. All other national programs are implemented through FHCs as routine programs.

Janakeeya Arogya Kendrams

Health sub-centres are renamed as Janakeeya Arogya Kendrams by the state government with additional facilities. Standards are laid down for infrastructure and services. Service delivery packages have been developed for all age groups according to their health status. Out of 5415 sub-centres, 4558 centres are provided with one qualified nurse (Middle Level Health Provider-MLHP) through NHM. All sub-centres are provided with Junior Public Health Nurses, and on average three centres have one Junior Health Inspector. These health field staff work in coordination with ASHA (one for each ward) Anganwadi workers, health volunteers, NGOs, and other agencies in the health sector. Janakeeya Arogya Kendrams function six days a week conducting various clinics for antenatal mothers, vaccination, adolescents,

Role of Local Self Government (LSG)

Leadership & Coordination:
- Managing primary care services
- Addressing social determinants of health (sanitation, water, nutrition, housing)
- Coordination with related departments, agencies, missions, and NGOs

Health Status Report (HSR):
- Prepared by LSGs with technical support from FHC team
- Analysis & prioritization of health issues for project preparation

Achievements & Goals

Health Indicators:
- Best compared to the rest of India
- On par with developed countries

Focus Areas:
- Addressing Non-Communicable Diseases (NCDs)
- Mental Health
- Vulnerable Populations (tribal, coastal, migrants, urban slum dwellers, elderly, women, children, transgenders, people with disabilities)

Sustainable Development Goal:
- Achieving good health and wellbeing for all
- Reducing out-of-pocket health expenditure

elderly, NCD, smoking cessation, etc. Field staff, along with ASHAs, conduct house visits fixing priority on diseases and vulnerability.

Role of Local Self Government in Primary Care

Since all institutions delivering primary care are transferred to Grama Panchayat and Block Panchayat, the LSG plays a crucial leadership role in managing and coordinating the primary care services under its jurisdiction. LSGs not only address direct health issues but also other social determinants of health like environmental sanitation, drinking water, provision of nutrients, housing, etc. LSGs coordinate all related departments, agencies, missions, and NGOs. The Health Status Report (HSR) of the population is prepared by LSGs with the technical support of the FHC team. Analysis of HSR and prioritising the health issues are done before preparing health and related projects.

Kerala's model of primary health care is hundred percent people-friendly, addressing all sections of society, accessible and affordable to all irrespective of their status, with special attention to the marginalised population, thereby reducing out-of-pocket expenditure on health and achieving the Sustainable Development Goal.

Ensuring Health
Kerala's Inclusive Healthcare

Kerala's healthcare system stands out for its blend of universal coverage and strategic inclusivity. By prioritising the needs of marginalised communities, the state has crafted a model that achieves impressive health outcomes while ensuring no one is left behind. This commitment to equitable healthcare, supported by innovative policies and significant government investment, sets a powerful example for other regions aiming to improve their health systems and provide better care for all citizens.

Dr. Bindu P. Verghese
Chief, Social Services Division,
Kerala State Planning Board

Kerala's healthcare system stands out for its universal coverage, ensuring access to medical services for all residents regardless of socio-economic status. This is supported by a robust network of primary and community health centers and hospitals that provide comprehensive care. Emphasizing primary healthcare enables early disease detection and prevention, alleviating pressure on higher-level healthcare facilities.

In Kerala, conscious policy efforts have helped in extending healthcare access to the most vulnerable and marginalised groups such as women, children, the elderly, disabled individuals, Scheduled Castes, Scheduled Tribes, migrants, and transgender persons. These initiatives provide affordable healthcare to everyone and free care specifically to these disadvantaged groups, underscoring the state's commitment to inclusivity and equity. Specialized programmes targeting maternal and child health, alongside initiatives focused on

for All
Model

improving nutrition and sanitation, have been pivotal in achieving Kerala's impressive health outcomes.

Focus on Women

Kerala has made significant strides in women's health, setting a benchmark for other Indian states. The state has the highest female life expectancy in the country at 77.8 years, compared to the national female average of 71.4 (SRS, 2022), due to comprehensive healthcare services and targeted programmes. Maternal and child health initiatives have been particularly successful, resulting in one of the lowest maternal mortality rates in India, thanks to widespread access to prenatal and postnatal care and skilled birth attendants. Additionally, Kerala's focus on women's education and empowerment has led to increased health awareness and better health outcomes for women across the state.

Kerala's inclusive health policies have significantly improved women's health through various targeted programmes, such as reproductive health, breast and cervical cancer screenings, and anemia prevention. Recent initiatives like VIVA (Vilarchayil Ninnu Valarchayilekku) for anemia and special cancer screening programmes exemplify the government's timely interventions. Public health campaigns and community-based efforts have ensured these services reach even remote areas, promoting equitable access to essential healthcare. This gender-sensitive approach has empowered women to take

charge of their health, enhancing individual outcomes and contributing to the state's socio-economic development

Free Health Care to the Children

The state has achieved internationally comparable lowest infant mortality and child mortality rates through continuous efforts of child care and universal vaccination. Special schemes and interventions in the area of child health are being implemented by Kerala government for ensuring healthy and happy childhood.

All children below 18 years are given free treatment in the government hospitals of Kerala. Apart from this, under Thalolam scheme free treatment is provided to the children below age of 18, who suffer from Kidney diseases, Cardiovascular diseases, Cerebral Palsy, Hemophilia, Thalassemia, Sickle Cell Anemia, Orthopedic deformities, and other Neuro-Developmental Disabilities. Currently Thalolam scheme is a part of Karunya Arogya

Suraksha Padhathi (KASP) which is being implemented as a comprehensive programme focusing on deserving segments of the population. Mittayi is the scheme for providing insulin and other treatment to children who have Type -1 diabetics.

Inclusion of Elderly

The proportion of aging population in the State has been increasing over the years and it has reached to 16.5 percent in 2021 as per Elderly in India Report, 2021. Apart from giving free treatment to elderly from BPL families in government hospitals, special schemes are being implemented exclusively for 60+ people in the State. Some of the health schemes for elderly were initiated by Social Justice Department. Sayam Prabha scheme, which is a comprehensive scheme, intends to address the physical as well as mental health of elderly. Sayam Prabha has components of Mandhahasam which provides free tooth sets for senior citizens, Vayoamrutham which is implemented with the support of the Indian System of Medicine for Ayurveda treatment for persons in Government old age homes, Vayomadhuram which supplies glucometers for old age people under the BPL category free of cost and Psycho-Social Care in Old Age Homes in association with NIMHANS. Smruthipadham, the Kerala State Initiative on Dementia provides day care facility to the needy.

Vayomithram: A social safety net programme implemented by Kerala Social Security Mission provides health care and support to elderly above the age of 65 years residing urban areas. The project provides health care and support by conducting free medical check-ups and treatment through mobile clinics.

Apart from these, geriatric wards function in taluk, district and general hospitals for giving exclusive attention to elderly. Special schemes for elderly are also being implemented by the Ayush department.

Health Care Interventions for Scheduled Castes and Scheduled Tribes

Kerala provides free treatment in government hospitals and special health schemes for Scheduled Castes and Scheduled Tribes. The T-Grants site offers treatment assistance, including Rs. 2 lakh relief for the death of a sole income earner. Close to 29 homoeo dispensaries function in different SC areas across the state and a dedicated medical college in Palakkad is functioning to pay more attention on the medical education of students from scheduled caste category.

Kerala's major health care schemes for Scheduled Tribes include the Comprehensive Tribal Health Programme, financial assistance for sickle cell anemia patients, Janani Janmraksha for pregnant women and adolescents, financial support for tribal healers, and mobile medical clinics. In 2022-23, 1,67,912 people received medical assistance, 889 sickle cell anemia patients got Rs. 2500 monthly, 9,601 pregnant and lactating mothers received Rs. 2500 monthly, 261 tribal healers received an annual grant of Rs. 10,000, and 3,900 medical camps were organized .

Persons with Disability

Social Justice Department, the nodal agency for disabled persons, undertakes various activities in collaboration with Health Department for addressing the health needs of persons with disability. Apart from various programmes for education, livelihood and rehabilitation, the Kerala Social Security Mission provides monthly assistance of ₹600 to the caregivers of patients of those categories who need a full-time caregiver

like 100 per cent People with visual disability, bedridden patients suffering from cancer, cerebral palsy, autism, mental illness, intellectual disabilities, and also to the bedridden old aged under Aswasakiranam scheme. Anuyatra Programme, an umbrella scheme for disabled, includes District Early Intervention Centres (DEIC) to ensure early screening of disabilities and provide appropriate health services.

Child Development Centre (CDC), IMHANS, National Institute of Speech and Hearing (NISH) and National Institute of Physical Medicine and Rehabilitation (NIPMR) are the organisations under Government of Kerala which undertake detection, management and rehabilitation of persons with disability. These organisations have various therapeutic departments and units for providing medical and therapeutic services.

Addressing health needs of Transgender Persons

Kerala is the first State in India to declare a Transgender (TG) Policy in 2015. The State started to implement a comprehensive programme, Mazhavillu, for transgender persons. The programme includes financial assistance for sex reassignment surgery (SRS) and post-SRS surgeries and insurance. Apart from this, all transgender persons are eligible for cashless treatment under KASP.

Health Care Interventions for Guest Workers

Migrant workers, addressed as guest workers, and their families receive special health attention, including general check-ups, medication distribution, health awareness and sanitation maintenance. The services provided by the department remain accessible by the migrants by adopting an innovative approach. A dedicated team 'Mobile Immigrant Screening team' (MIST) is designated so that services are delivered at places and time of their convenience.   This team regularly visits and screens migrants for various diseases, actively detects tuberculosis, HIV, and STDs, conducts awareness campaigns at their rest stops, work sites, construction sites, etc. They also provide antenatal and postnatal care and immunization services, ensuring comprehensive healthcare for migrants.

Health Insurance for Interstate Migrant Workers (AWAAZ): Government has introduced a Health cum death Insurance scheme for guest workers. Accordingly an insured will get health insurance of ₹25,000 and two lakh of accident death insurance claim. A total of 516320 guest workers have taken registration card under this scheme.

Affordable health care through Karunya Arogya Suraksha Padhathi

Kerala comprehensive s implementing a health insurance programme called the Karunya Arogya Insurance Progrmme (KASP) through the State Health Agency (SHA) as an assurance mode. Central scheme of Ayushman Bharath programme is also implemented by SHA as a part of KASP. Apart from the beneficiaries identified by the Socio-Economic Survey for Ayushman Bharath Programme, nearly 22 lakh households were identified by the State as beneficiaries of KASP. Thus, currently 42 lakh beneficiaries are covered by KASP. As Ayushman Bharath programme is part of KASP, migrant workers are also benefitting out of this. Since last year, provision has also been given for cashless treatment to disabled, and transgender persons.

Kerala Way Ahead in Community Health Care

Various Community Health Programmes in the State

Gouri Prasannan
Freelance Journalist

Our State has gained international attention for best health indices, including low infant and maternal mortality rates. Kerala has been investing and focusing on clean drinking water, better sanitation facilities, roads, and housing projects for ensuring a better quality of life for the citizens. The state's model of health stresses providing good health based on social welfare, justice, and equity.

Higher literacy rates in Kerala, especially the awareness among women as an output of it, play a crucial role in securing the health of each member of a family. They make sure that children receive vaccinations on time, that elders are cared for and maintain overall cleanliness in home and surroundings, and look after the overall wellbeing of the family members, says Dr. Anish T.S., Professor (CAP), Department of Community Medicine, Government Medical College, Manjeri and Nodal officer, Kerala One Health Centre for Nipah Research and Resilience. Citing a report, published in the Lancet on the Value of Death, Dr. Anish adds that Kerala pays more for end-of-life care.

"In the last eight years, much has been done to upgrade the infrastructure and basic facilities in all Family Health Centres (FHCs). Kerala State Government sets aside a considerable amount of the Budget for addressing the health concerns of the people. Ardram, the flagship programme of the State

Government for achievements in health, uplifted the FHCs and ensured quality facilities, doctors, diagnostics, and medicines," says Dr. Anish.

Those who are economically backward benefit as good quality generic medicines are now available under the KARUNYA scheme. Pharmacies in Government Hospitals, FHCs, etc. have now been allotted AC facilities to prevent medicines from getting damaged. This is being done under the supervision of Kerala Medical Services Corporation Limited (KMSCL).

Kerala's unique organisational structure, policies, and programmes keep health at the centre stage of development, says Dr. Indu P.S., HoD, Community Medicine, Government Medical College, Kollam. This, she points out, is one of the reasons why there is a lot of investment in health education and in social sectors.

At the FHC-level, ASHA workers have been gathering details about people living in each ward—those living alone, and people who have lifestyle diseases. These details are now getting updated in the 'Shaili' App which can be accessed by health officers to understand the health requirements in any given area in the State. The system captures the data of the diabetes and hypertension status of the individuals which help local FHCs to take appropriate actions. Common respiratory diseases and

mental health issues are also addressed at local FHC levels through designated clinics named SWAS and ASWAS.

We are living in an era where new variants of infectious diseases are cropping up. The State uses a 'One Health' strategy to contain emerging infectious diseases. The strategies are being piloted in the Pampa Basin district as a part of the Rebuild Kerala Initiative. The emergence of antibiotic resistance is another concern. To tackle this, the State has formed an initiative named Kerala Anti-microbial Resistance Strategic Action Plan (KARSAP). As antibiotics enter the food cycle, air, water, and soil get traces of it, thus harbouring microbe variants resistant to the same. We can understand the alarming situation if we analyse the re-emergence of drug-resistant Tuberculosis bacteria (TB) and many other microorganisms, says Dr. Anish. Now, a document, containing details of patient history, diseases and antibiotic drug resistance, is being prepared in most of the big hospitals. This is an Antibiogram that would help find solutions for new resistant disease variants.

The State Government has a large section of people utilising BPL facilities. If, for instance, the ration card usage is considered, apart from those using white cards, all fall under the BPL category. So, the State Government will have to find sources to meet expenses of health schemes, to support the BPL category under the Karunya Arogya Suraksha Padhathi.

The Kerala Government had recently introduced VIVA Scheme ('Vilarchayil Ninnu Valarchayilekku') to tackle anaemia in women and girls aged between 15 and 59 years. People get updated about various government schemes, for health benefits, through State Government notifications via various media outlets.

Kerala has the 'Sukrutham' scheme to provide cancer treatment to the needy, the 'Pariraksha' Scheme for differently-abled, and

'Amma Manas' to address psychiatric disorders among women during pregnancy and post-delivery. This was launched in collaboration with the National Health programme.

When the United Nations Organisation had introduced Sustainable Development Goals (SDG), Kerala set goals for the State, based on the data, says Dr. Indu. "Based on the SDG targets of the State, Aardram was designed in a way that health reaches the community. There is involvement of the community and there is involvement of the Local Self Government. This is why in Kerala, almost every component of programmes and policies, within the health sector has direct and indirect community involvement. In addition to this, each SDG target was set based on the data in the State (under Aardram). There is a strong community component within the Aardram phase itself. This can be understood better if we analyse the documents linked to the initial Aardram project," adds Dr. Indu.

Kerala is a State where there is the highest-level community-level participation in deciding various projects that would benefit from the grassroots level. It has the participation of the Local Self Government. "Decentralised planning is best designed in such a way that benefits are reflected in the health sector," adds Dr. Indu. Several programmes of the Local Self Government directly benefit the health sector.

The nutritional programmes of the Women and Child Department and Social Justice Department showcase strong inter-sectoral coordination. For instance, nutrition supplementation through Anganwadis reaches children, women of reproductive age, and lactating women, adding to the national framework. Additionally, under the Aardram Scheme, the State Government is enhancing government hospitals by upgrading Primary and Family Health Centres to improve infrastructure and service quality, making them more people-friendly.

Making the State Proud

Kerala's field health workers are global role models of dedication, resilience, and innovation, making the State proud of their contributions.

Ignatius Pereira
Senior Journalist

The army of health sector field workers in the State comprises the Accredited Social Health Activists (ASHA) workers, the health inspectors and the public health nurses. Though the ASHA workers are not one among the salaried permanent staff of the State's Health Department (they are given an honorarium), they are an integral part of the corps of the health sector field workers along with the health inspectors and public health nurses. They have been deployed after providing them with the required training.

Dr. Vyas Sukumaran, the National Health Mission programme officer for Kottayam and Ernakulam districts, said that in spite of the absence of a permanent staff tag, the ASHA worker remains the prime grassroots level field staff of the Health Department- "in fact they are full time field level health workers given the Kerala situation and there is one ASHA worker for each ward in the State."

Dr. Vyas said that the basic duty of the ASHA worker is carrying out house to house visits and updating their immediate superiors of the Health Department on any health concern developments detected. They form vital links between the community and the Health Department vis-à-vis a health alert and consequent intervention if needed especially when it comes to the outbreak of any communicable or epidemic diseases.

"They serve as surveillance agents of the health department constantly monitoring the community's health landscape, detecting early warnings of potential health issues and providing critical insights to take swift action and timely interventions", said Dr. Vyas.

The health sector reforms introduced by the Kerala Government which took roots in 2017 had revolutionised the role of the ASHA workers. Through the reforms, the Primary Health Centres were upgraded to Family Health Centres (FHC) with additional staff and better infrastructure. The FHC is the place from where the initial medical doctor level treatment is imparted and there is one for each grama panchayat on the lines of a family doctor concept.

Below the FHC, sub-family health centres are coming up on the basis of one such sub centre for two or three wards based on the population. The sub centres will be health care centres manned by health sector field workers in the rank of health inspectors and public health nurses. It will be through the sub centres that preventive measures like immunisation plus family planning programmes are being coordinated and

carried out. Together with the ASHA workers they form the field level workers of the State's health sector. The Asha workers are the link for the community with the sub centres, the FHC and the Block Panchayat level health centres.

There are several key factors that have enabled Kerala's health workers to set a benchmark for others to follow.

Kerala's health system emphasises primary health care, which serves as the foundation for its public health achievements. Health workers in Kerala operate within a decentralised healthcare structure, ensuring that even the most remote villages have access to basic medical services. This grassroots-level focus allows for early detection and prevention of diseases, significantly reducing the burden on tertiary care facilities.

Kerala's field level health workers have successfully fostered a strong bond with the communities they serve. This trust is built on consistent and reliable healthcare delivery, along with effective communication. Health workers actively engage with local populations through health education campaigns, vaccination drives, and regular health check-ups. The involvement of local self-governments and community health volunteers has further strengthened this bond, ensuring widespread participation in health initiatives.

Innovation is yet another hallmark of Kerala's approach to healthcare. During the Nipah virus outbreak in 2018 and the COVID-19 pandemic, Kerala's field level health workers demonstrated exemplary crisis management skills. They swiftly implemented contact tracing, quarantine

ASHA
Bringing Hope and Health to Every Home

- **Dedicated Service:** ASHA workers are the backbone of Kerala's public health, tirelessly visiting homes, monitoring community health, and providing critical insights for timely interventions.

- **Trusted Guardians:** As frontline surveillance agents, they ensure early detection of health issues, preventing outbreaks and promoting healthier communities.

- I**nnovative and Resilient:** From managing crises like the Nipah virus and COVID-19 to leveraging technology for telemedicine, their adaptability sets them apart.

- **Community Connectors:** Building strong bonds with local populations through health education campaigns, vaccination drives, and regular check-ups, they foster trust and widespread participation.

- **Inclusive Care:** Committed to equity, ASHA workers deliver services without discrimination, reaching marginalised and vulnerable populations to guarantee health for all.

measures, and community surveillance, effectively containing the spread of these diseases. The use of technology for telemedicine, digital health records, and mobile health units has also enhanced the reach and efficiency of healthcare services in the state.

After benefitting from a robust training and support system, Kerala's field level health workers serve as the eyes and ears of the Health Department. Continuous professional development programmes have ensured that they are well-equipped to handle emerging health challenges. The state's health department provides regular training sessions on disease management, maternal and child health, and public health emergency response. Additionally, mental health support for health workers, especially during crises, has been a priority, recognising the psychological toll of their demanding roles.

Kerala's health workers address medical and social determinants of health, collaborating with various government departments on nutrition, sanitation, and education. This holistic approach makes health interventions more effective and sustainable. Programmes for maternal and child health, combating malnutrition, and promoting healthy lifestyles have significantly improved public health indicators.

Equity and inclusivity are central to Kerala's healthcare model. Field-level health workers deliver services without discrimination, ensuring marginalised communities, including tribal populations and the urban poor, receive adequate care. Special programmes for vulnerable groups, such as the elderly and differently-abled individuals, highlight Kerala's commitment to inclusive healthcare.

Kerala's Pioneering Palliative Care: A Model for the World

In a global healthcare landscape focused on curative treatment, Kerala's palliative care policy stands out. By addressing patients' comprehensive needs, Kerala sets a WHO-recognized standard and serves as a model for developing nations.

Adarsh Onatt
Freelance Journalist

The World Health Organization (WHO) defines palliative care as an approach to enhance the quality of life for patients and families facing life-threatening illnesses, focusing on preventing and relieving suffering through early identification, assessment, and treatment of pain and other issues. Despite its importance, palliative care remains insufficient globally, with 45% of all deaths in 2015 involving serious health-related suffering, highlighting the need for better services, especially in developing countries, as emphasised by the Sustainable Development Goals (SDGs) and the Astana Declaration (2018).

The Genesis of Palliative Care in Kerala

Kerala's journey into palliative care began in the early 1990s with the efforts of dedicated non-profit organizations led by doctors. The movement gained significant momentum in 2000 with the inception of the Neighbourhood Network in Palliative Care (NNPC) in Malappuram. This initiative mobilised local communities to provide home-based care for chronically ill and dying patients, emphasising community participation and volunteerism.

By 2007, the NNPC model had spread across 100 panchayats in Malappuram, resulting in the formation of 300 palliative care units. This grassroots success captured the state government's attention, leading to the formulation of Kerala's first Palliative Care Policy in 2008. This policy mandated the inclusion of palliative care projects in local government plans, and by 2012, 90% of local bodies had adopted this initiative. In

2008, Kerala formulated its first Palliative Care Policy, emphasising home-centric care based on the experiences gathered over the years. This was mostly done on the basis of the experience of the palliative care workers in the previous years. The decade long process of the policy has strengthened the palliative care in Kerala and made it a significant element in the patient care.

The Comprehensive Palliative Care Policy of 2019

Building on its initial success, Kerala revised its Palliative Care Policy in 2019 to further strengthen and expand its palliative care services. The policy aims to provide high-quality, accessible palliative care to all in need, grounded in several key principles:

Rights-Based Approach: Treating palliative care as a fundamental human right.

Universality: Ensuring that no one is left behind, especially the poorest and most vulnerable.

Integration: Embedding palliative care within all medical disciplines and healthcare systems.

Multi-Sectoral Approach: Involving various departments and stakeholders to provide comprehensive care.

Community-Based Care: Empowering local communities to actively participate in care delivery.

The policy outlines specific roles for primary, secondary, and tertiary levels of care. At the primary level, community health workers and volunteers provide home-based care. Secondary care involves Community Health Centres (CHCs) with dedicated palliative care beds and services, while tertiary care includes specialised divisions in medical colleges and district hospitals.

Training, Capacity Building, and Community Involvement

Training and capacity building are critical components of Kerala's palliative care policy. Mandatory training for healthcare personnel, sensitisation programmes for students, and partnerships with NGOs and community-based organizations (CBOs) ensure that all stakeholders are equipped to deliver quality care. The policy also emphasises the importance of documentation and research to continuously improve palliative care services.

Kerala's model places strong emphasis on community participation and volunteerism. Local self-government bodies and volunteers play a crucial role in providing care under the supervision of the primary health system. This community-based approach ensures that quality palliative home care is accessible to everyone in need.

Special Focus on Vulnerable Populations

Kerala's palliative care policy pays special attention to vulnerable groups, including children, people in geographically inaccessible areas, and individuals living with HIV/AIDS. The policy ensures these groups receive tailored palliative care services. Additionally, efforts are made to support the socio-economic rehabilitation of patients, providing them with skills and opportunities for livelihoods.

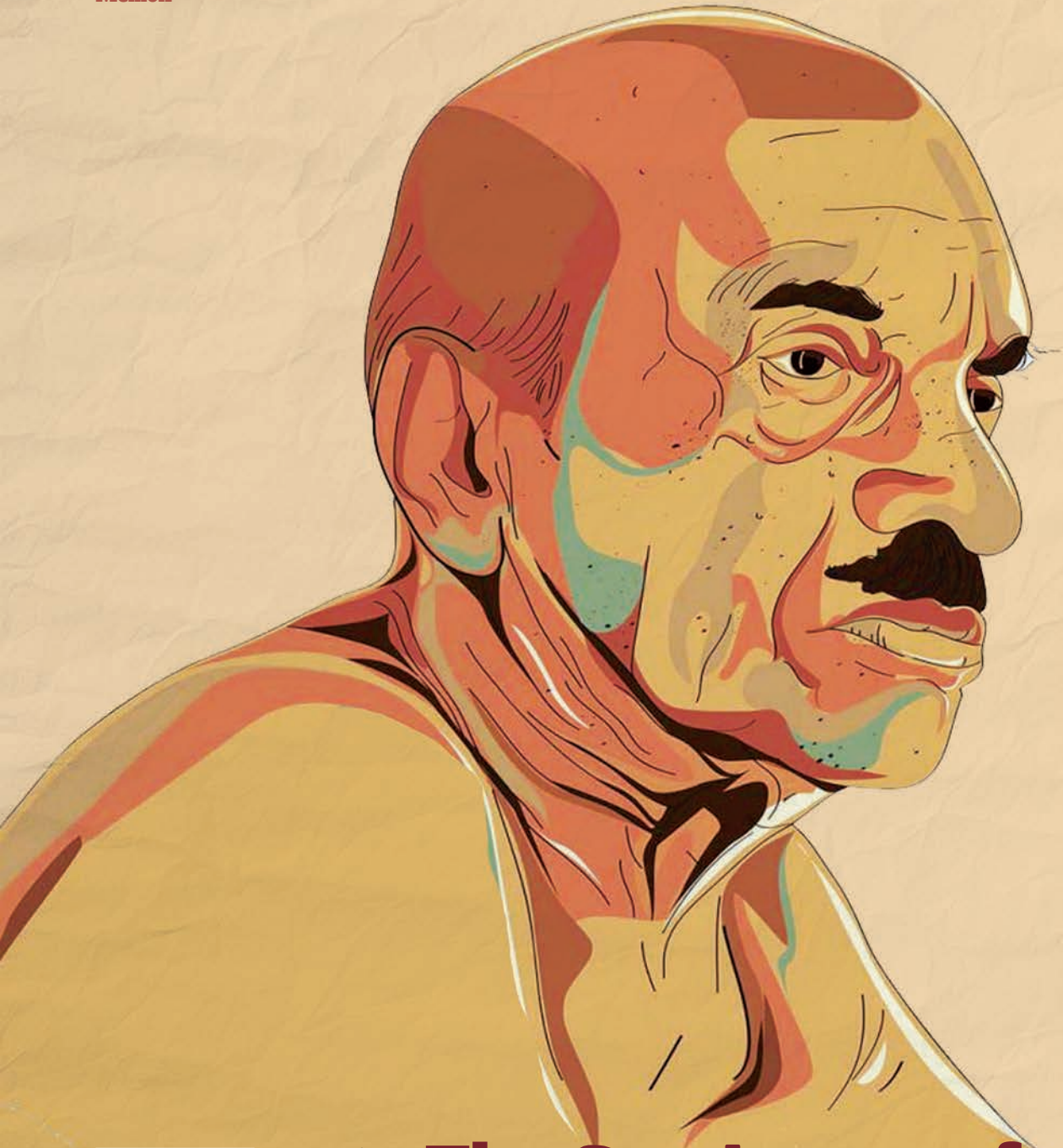## Integration of Traditional and Modern Care

Kerala's holistic approach integrates systematic palliative care activities within the AYUSH sector, blending traditional and alternative medicine with modern palliative care practices. This enhances the quality of care provided to patients.

Education and Training Initiatives

Kerala has developed a unified curriculum for palliative care courses and launched a Diploma in Domiciliary Nursing course. Palliative training centres in all districts ensure a steady supply of skilled professionals dedicated to providing compassionate care.

Recognition and Impact

Kerala's innovative and compassionate approach has earned recognition from the WHO and has positioned the state as a leader in palliative care. The state's dedication to ensuring quality palliative care through comprehensive planning, education, and community involvement serves as a model for regions worldwide, showcasing the profound impact of a well-structured palliative care system.

The Continuum of Innocence and Agony

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Basheer's Balyakalasakhi flows through my soul, profoundly shaping my understanding of love, loss, and the bittersweet beauty of existence.

Vaikom Muhammad Basheer isn't just a name on a book cover; he's a magician who weaves tales with the threads of raw emotion and sarcasm. His masterpiece, Balyakalasakhi (Childhood Companion), isn't merely a story; it's a tapestry woven with the vibrant colours of childhood innocence and the silenced tones of a life unfulfilled. This heart-touching tale of Majeed and Suhra has become a cornerstone of my understanding of love, loss, and the bittersweet beauty of existence.

Basheer's prose dances on the page like fireflies on a summer night – sometimes flickering with gentle humour, other times illuminating the depths of despair. His characters, much like these fireflies, are real and relatable, their flaws reflecting the imperfections we all carry within. This is precisely what drew me into Balyakalasakhi. Majeed, with his rebellious spirit and yearning for a life less ordinary, felt like a kindred spirit. Suhra's quiet strength and unwavering determination in the face of an oppressive marriage became an inspiration, a testament to the resilience of the human spirit.

The early chapters appear with the innocence of childhood friendship. Majeed and Suhra's playful banter, their shared secrets whispered under the shade of a mango tree, took me back to a time when scraped knees and stolen glances held the power to ignite a universe of emotions. These scenes unearthed forgotten memories of my own childhood companions, reminding me of the magic of those unburdened years.

However, as the story unfolds, the shadows of societal norms and economic hardship begin to cast their long, dark fingers. Majeed's exile, his father's disapproval, and Suhra's forced marriage paint a stark contrast to their idyllic childhood. This shift mirrored my own transition into adulthood, where dreams are forced to confront reality, and love often struggles to survive against the tide of practicality.

Basheer doesn't shy away from depicting the harsh realities of life.

Basheer doesn't shy away from depicting the harsh realities of life. Suhra's transformation from a spirited young girl to a woman trapped in a loveless marriage was a gut punch.

It's a reminder of the fleeting beauty of childhood dreams, the enduring strength of love, and the importance of holding on to hope even amidst the harshest realities.

Suhra's transformation from a spirited young girl to a woman trapped in a loveless marriage was a gut punch. Yet, amidst the despair, a flicker of hope remains. Majeed's return and his defiant declaration of love – a love that refuses to be silenced – resonated deeply within me. It was a testament to the enduring human spirit, the ability to find solace and strength even in the face of loss.

Balyakalasakhi transcends the boundaries of a love story. It's a powerful critique of societal structures that dictate who we can love and how we should live. Majeed's father, a symbol of rigid tradition, represents the forces that attempt to control our destinies. This resonated with my own struggles to navigate societal expectations and forge my own path in life. Basheer's subtle critique served as a catalyst, encouraging me to question the status quo and fight for the life I truly desire.

But the magic of Balyakalasakhi resides not only in its thematic depth but also in Basheer's masterful storytelling. His metaphors are like brushstrokes on a vibrant canvas, painting vivid pictures that linger long after the last page is turned. The "enthaayi sneham" (the love that burns like embers) that consumes Majeed and Suhra becomes an emotion we can touch and feel. This, coupled with Basheer's signature humour, makes the novel a captivating journey – a testament to the power of words to evoke a kaleidoscope of emotions.

Balyakalasakhi is more than just a book. It's a piece of myself, a story that has become interwoven with the fabric of my being. It's a reminder of the fleeting beauty of childhood dreams, the enduring strength of love, and the importance of holding on to hope even amidst the harshest realities. Basheer's words have become a guiding light, a constant companion that whispers encouragement as I navigate the complexities of life. In a world that often feels chaotic and unforgiving, Balyakalasakhi serves as a haven, a reminder that even the most bittersweet stories can leave an indelible mark on our souls.

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CM inaugurates AI Conclave

Chief Minister Pinarayi Vijayan inaugurated the International Generative AI Conclave in Kochi, emphasising the state's potential to become a leading hub for AI innovation. Organised by KSIDC in collaboration with IBM, the event highlighted the transformative impact of AI across sectors like tourism, healthcare, education, and renewable energy. The Chief Minister underscored AI's role in boosting economic growth, improving quality of life, and addressing challenges such as human-wildlife conflicts and agricultural productivity. He also announced initiatives to integrate AI into school curricula and e-governance platforms, aiming to position Kerala at the forefront of AI-based advancements and sustainable development.

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