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Research Article

A Dedicated Out of Box Care and Support by A Government Doctor for the Patient Welfare in A Tertiary Care Hospital in Tamil Nadu- A Role Model for Other Doctors in India

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Background: Government hospitals serving as primary safety nets often face challenges balancing high patient volumes with administrative delays. This study examines the "Total Patient Welfare" model pioneered by Prof. Dr. S. Vetrivel Chezian to overcome these limitations at a tertiary care center in Tamil Nadu. Materials and Methods: A retrospective descriptive design was utilized to evaluate infrastructural enhancements, patient welfare activities, and academic interventions at the Institute of Orthopaedics and Traumatology, Coimbatore Medical College Hospital. The evaluation covers a 15-year period from 2010 to July 2026, extracting data from administrative records, donation registries, and departmental progress reports. Results: Under this leadership, the department was successfully upgraded to an Institute in 2018, expanding its scope of specialized trauma care. Clinical milestones included treating 581 children for congenital clubfoot and performing 105 corrective surgeries through a dedicated clinic that remained operational throughout the COVID-19 pandemic. A newly established artificial limb production center achieved a zero-waiting-list status, delivering lightweight prostheses to 213 beneficiaries across 20 districts. Infrastructural and hygienic standards were significantly elevated via personal philanthropy, including the donation of OT lights, CCTV networks, surgical instruments, 926 high-quality bedspreads, and ergonomic caregiver cots. Crisis management during the pandemic included the implementation of India's first orthopaedic surgical fixation protocol for COVID-19. Academically, the tenure fostered a robust research culture by founding the national COACON postgraduate conference, establishing an E-library, and publishing specialized NMC-aligned orthopaedic textbooks. Conclusion: The integration of administrative efficiency, targeted personal philanthropy, and ergonomic innovation effectively bridged institutional gaps, elevating public orthopaedic healthcare to corporate standards. This tenure provides a scalable, out-of-the-box blueprint for clinical leadership and patient dignity across India.

Keywords: Orthopaedics; Patient Welfare; Healthcare Administration; Philanthropy; Traumatology; Public Health Infrastructure.

INTRODUCTION

Coimbatore, recognized as the industrial powerhouse of Tamil Nadu and the "Manchester of South India," experiences a unique intersection of high-density industrial labor and heavy vehicular traffic. This environment has led to a significant surge in complex polytrauma cases, particularly high-velocity road traffic accidents (RTAs) involving complicated fractures and associated injuries. Coimbatore Medical College Hospital (CMCH) stands as the primary safety net for the region's underprivileged population. However, the sheer volume of patients often creates a gap between immediate clinical needs and the administrative timeline of government-funded schemes. This article examines the transformative leadership of Prof. Dr. S. Vetrivel Chezian, Director of the Institute of Orthopaedics and Traumatology, who pioneered a model of "Total Patient Welfare" from 2010 to July 2026. His interventions demonstrate how a government doctor can act as a

catalyst for institutional change by integrating personal philanthropy with administrative excellence.

MATERIALS AND METHODS

This study utilizes a retrospective descriptive design to evaluate the patient welfare activities, infrastructural enhancements, and psychosocial interventions implemented within the Institute of Orthopaedics and Traumatology at CMCH. The study period spans fifteen years (2010–July 2026). Data were extracted from:

- Institutional administrative records and donation registries.
- Documented timelines of equipment installation and ward upgrades.
- Departmental progress reports regarding patient turnover and hygiene protocols.
- Academic output and community outreach metrics.

RESULTS AND DISCUSSION

1. Upgrading Department of Orthopaedics to Institute of Orthopaedics and Traumatology

The transition from a Department to the **Institute of Orthopaedics and Traumatology** in 2018 has allowed for expanded research, better funding utilization, and a broader scope of specialized trauma care, setting a benchmark for medical colleges across India. (Fig 1)

Fig 1: Tamil Nadu G.O for upgradation to Institute of Orthopaedics and Traumatology

2. Foot deformity correction clinic for new born and children (2011–Present)

The department operates a **Foot Deformity Correction Clinic** every Thursday. This initiative has been functioning continuously, even during the COVID-19 pandemic, without requiring additional government funding. (Fig 2) and he published the Biggest sample size in India in Club foot as on date. The only hospital in India **Foot Deformity Correction Clinic** was functioning during covid19 pandemic apart from covid designated care.

- **Clinical Impact:** 581 children treated for congenital clubfoot.

- **Surgical Success:** 105 corrective surgeries performed to prevent lifelong disability.
- **Sustainability:** Operated entirely through internal resource management.

Fig 2: Before and After treatment images of club foot children

3. Genesis of Artificial limb production centre from sub centre

By strategically recycling TNCMCHIS/ABPMJAY (Ayushman Bharat) funds, the Nominee transformed a sub-centre into a high-tech Lightweight Artificial Limb Production Centre in 2020 during covid -19 pandemic without expenditure to the Government, a model for other medical colleges in India .(Fig 3)

- **Regional Reach:** Serves a 400km radius covering 20 districts in Tamil Nadu.
- **Efficiency:** Coimbatore district Successfully cleared the backlog to achieve a **zero-waiting-list** status in India.
- **Output:** 213 beneficiaries have received lightweight prostheses to date.

Fig 3: Artificial limb production centre functioning.

4. Professor S. Vetrivel Chezian's exceptional contributions to healthcare have earned him the rare distinction of being commended by three consecutive Chief Ministers of Tamil Nadu between 2020 and 2026. His impactful work was first recognized during the height of the COVID-19 pandemic, when then-Chief Minister Mr. Edappadi Palanisamy lauded his initiative to establish a much-needed artificial limb production center. His compassionate care was highlighted again when former Chief Minister Mr. M.K. Stalin formally appreciated his life-changing work in fitting artificial limbs for a three-year-old boy, Rishwanth. Most recently, on the occasion of India's 80th Independence Day on August 15 in2026, Honourable Chief Minister Thiru C. Joseph Vijay conferred the prestigious "Chief Minister's Best Practice Award" for the "Impact of Production of lightweight artificial limbs in Coimbatore Medical College Hospital without expenditure to Government by recycling TN-CMCHIS-orthopaedic department fund –First of its kind in India and A model for the entire nation-, milestone achieved directly through Professor Chezian's visionary leadership and relentless efforts.(Fig:4)

Fig 4: Prof S. Vetrivel Chezian appreciated by consecutive three Chief Ministers of Tamil Nadu

5. Neonatal Nutritional Security: The "Cradle Baby" Support

The "Cradle Baby Scheme," an iconic initiative by the late Chief Minister Selvi J. Jayalalithaa, sought to eradicate female infanticide. Recognizing that the success of this program relied heavily on immediate postnatal nutrition, Prof. Chezian committed his personal funds to ensure a supply of specialized milk powder for these infants. This proactive financial commitment filled a critical nutritional gap for several years until the formal establishment of a regional human milk bank, ensuring that vulnerable newborns received a healthy start regardless of institutional procurement cycles.

6. Life-Saving Diagnostic Interventions in the "Golden Hour"

In trauma surgery, the "Golden Hour" is the period where prompt intervention significantly reduces mortality. RTAs involving long-bone fractures are frequently complicated by occult head injuries. In all government hospitals, a nominal fee of ₹500 required

for CT scans—a sum that often-caused delays for families from low-socioeconomic backgrounds. Understanding that every minute counts, Prof. Chezian established a personal funding protocol to cover CT scan costs for trauma victims. This system remained in place until the landmark *Innuyir Kappom Thittam-48 (IKT-48)* scheme was launched by the Government of Tamil Nadu, which now mandates free care for the first 48 hours of trauma.

7. Philanthropic Infrastructure and Surgical Capacity Building

Following the TNOACON 2017 state conference, Prof. Chezian, as Organizing secretary, leveraged, persuaded the organising committee to donate three high-intensity Operation Theatre (OT) lights, furniture (tables/chairs) and the installation of a CCTV network in orthopaedic wards valued at over ₹10 lakhs, which modernized the surgical suites without placing a financial burden on the state exchequer, significantly improved administrative oversight and patient security.(Fig 5) This upgrade directly correlated with an increased volume of surgeries and improved visual precision during complex reconstructions. Furthermore, he donated Rs 4 lakhs worth of new surgical instruments, bedspreads, pillows and new dhothis, new shirts, adult diapers and new nighties for the benefit of patients in the Institute of Orthopaedics and Traumatology (Fig 6).

Fig 5: CCTV in Orthopaedic wards at Institute of Orthopaedics and Traumatology

Fig 6: Prof. S. Vetrivel Chezian donating items worth Rs 4 Lakhs

8. Hygiene Standards and "Corporate-Level" Sanitation

The high patient turnover in a tertiary centre often strains the laundry and sanitation departments. To combat the risk of hospital-acquired infections and improve patient morale, Prof. S. Vetrivel Chezian donated 926 high-quality bedspreads,pillows (Fig 7). This ensured a robust rotation of clean linen, effectively bringing the aesthetic and hygienic standards of a government ward on par with private corporate hospitals. This initiative transformed the ward environment into a space of recovery rather than just a place of treatment.

Fig 7: High-quality pillows and Bedspreads and bed sheets were donated to Institute of Orthopaedics and traumatology

9. Ergonomic Caregiver Support: The "Slide-Under" Cot Innovation

In Indian government hospitals, the "attender" (caregiver) plays a vital role in recovery, yet they often suffer from poor sleep and joint pain due to lying on the floor. In 2019, Prof. S. Vetrivel Chezian introduced a revolutionary furniture design: specialized ergonomic cots (feet) for attenders (Fig 8). These cots were engineered to slide beneath the patient's bed during daytime clinical hours, thereby preserving the floor space required for medical rounds and cleaning, while providing a dignified resting space at night. Dedicated lockers were also installed to ensure that families could store their belongings securely, reducing the clutter typical of busy wards.

Fig 8: Innovative attender cots at Institute of Orthopaedics and Traumatology

10. Restoring Patient Dignity: The Orthopaedic Destitute Welfare Program

Vulnerable and destitute patients often arrive at the hospital with tattered clothing and no social support. To address this, a supply of new attire (including nighties, shirts, and dhotis) was made available without expenditure to the government (Fig 9). By providing clean, new clothes upon admission, the department ensured that every patient—regardless of their financial status—was treated with the dignity and respect essential for psychological healing. Establishment of wards for Orthopaedic destitutes without attenders

Fig 9: New Dhotis, Nighties and Adult Diaper for no attender patients without expenditure to government

11. Preventive Clinical Excellence: The Early Adoption of Alpha Beds

Recognizing that prolonged immobilization leads to debilitating pressure sores (decubitus ulcers), Prof. Chezian initiated the provision of "Alpha" (air) beds for chronically ill patients without expenditure to

government in 2018, well before the arrival of bedsore prevention project by the Government of Tamil Nadu be. By implementing this preventive measure years before formal bedsore prevention schemes were institutionalized, he demonstrated a commitment to reducing secondary complications, thereby shortening hospital stays and improving the overall quality of life for long-term patients.

12. Essential Amenities and Psychosocial Wellbeing

Recognizing that recovery is both physical and mental, the "Water Doctor" systems were donated to provide constant access to purified drinking water and hot water within the wards (Fig 10). To mitigate the "institutionalization" stress of long-term hospitalization, television and radio systems were installed without expenditure to the government. These amenities created a stress-free environment, which is clinically proven to lower cortisol levels and facilitate faster recovery in orthopaedic patients. Attender cots, Air-conditioned state of art ICU cots in postoperative ward, Radio, Television, CCTV, 24 X 7 Hot water facilities (Fig 11).

Fig 10: Fully air-conditioned ICU cots

Fig 11: Water Doctor,24 X 7 Hot water, Radio and television facilities

13. The Academic E-Library and Digital Mentorship

To ensure the next generation of surgeons is globally competitive, Prof. Chezian motivated post graduate students to establish an E-library within the institute, first among government hospitals in Tamilnadu

without expenditure to the government. By providing access to indexed journals and the latest surgical literature, he fostered a culture of evidence-based medicine. This resulted in an increased number of research publications and presentations at state and national conferences, cementing the institute's reputation as a centre for academic excellence.

14. Community Outreach and Trauma Prevention

Extending his role beyond the operating room, Prof. Chezian engaged in public safety advocacy. Utilizing radio and YouTube platforms, he launched awareness campaigns targeting the youth to encourage adherence to traffic laws. This "preventive orthopaedics" approach highlights a doctor's responsibility to address the root causes of trauma within the community.

15. Out of Box thinking during COVID 19 Pandemic (Crisis Leadership & Clinical Innovation During COVID-19):

- **Pioneering Surgical Protocols first in India:** Designed and implemented India's first and only COVID-19 orthopedic surgical fixation protocol (Fig 12). This innovation allowed CMCH to conduct continuous, uninterrupted orthopedic surgeries safely while other government hospitals were shut down for non-COVID care.
- **Coivd-19 Strategic Manpower Deployment:** Served as Vice-Chairman of the COVID-19 Management Manpower and Deployment Committee, effectively organizing and mobilizing healthcare staff to meet surging demands. (Fig 13)
- **Coivd-19 Logistics & Welfare Management:** Directed the comprehensive food supply logistics, ensuring safe and consistent nutritional support for both isolated patients and frontline medical staff.
- **Boosting Frontline Morale:** Spearheaded an official recognition program, personally ensuring that tireless frontline workers were appreciated and awarded certificates during republic day celebrations to maintain motivation during the high-stress crisis. (Fig 14)
- **Sustaining Essential Pediatric orthopaedic Care:** Demonstrated extraordinary commitment to newborn health by keeping the specialized club foot clinic fully operational throughout the lockdown, ensuring critical early interventions were not delayed. (Fig 15)

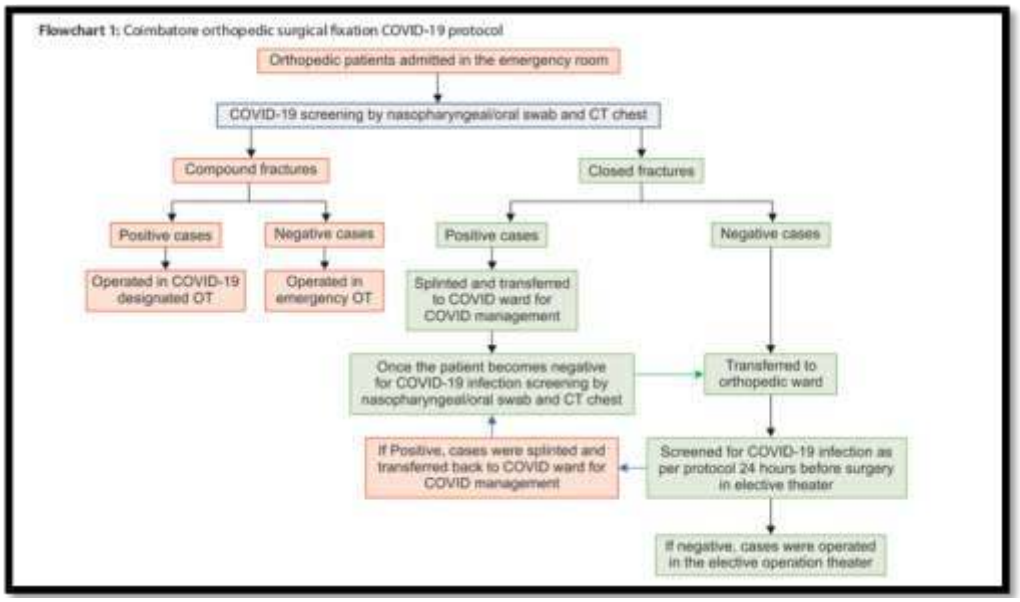

Fig 12: First devised orthopaedic surgical fixation protocol in India

HOSPITAL ORDER

COIMBATORE MEDICAL COLLEGE HOSPITAL

PROFESSORS DUTY INCHARGES

Fig 13: Prof. S. Vetrivel Chezian appointed as Vice Chairman of COVID committee and Food committee chairman during COVID period.

Fig 14: Appreciation certificates for COVID frontline workers

Fig 15: Club foot clinic was fully functional even during COVID pandemic

16. Improved ambience of the hospital by donating LED display board, Thirukkural and Quotes of famous national leaders. He also made sure the ward premises is tidy and clean and on par with corporate hospitals. (Fig 16)

Fig 16: Improved ambience in Orthopaedic wards.

17. Authoring Text books as per National medical commission regulations

He authored Vetrivel Textbook of Orthopaedics (Two Editions), Vetrivel Clinical Orthopaedics, Vetrivel Orthopaedics for Postgraduate Students as per latest guidelines and National Medical Council CBME Curriculum.in simple English,easy to understand with colour diagrms to understand in a betterway.(Fig 17)

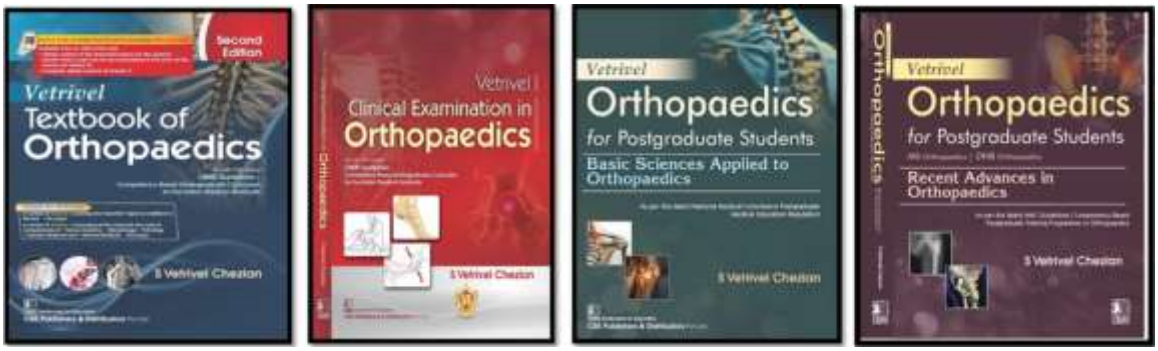

Fig 17: Vetrivel textbook of orthopaedics, Vetrivel clinical examination in Orthopaedics, Vetrivel orthopaedics for postgraduate students are written by Prof. S. Vetrivel Chezian

18. Professor S. Vetrivel Chezian has been instrumental in maximizing the potential of the Medical Research Unit (MRU) at Coimbatore Medical College, transforming it into a dynamic hub of scientific inquiry. As a dedicated academic mentor, he actively cultivates a strong research culture by empowering medical students to look beyond standard textbooks and engage in advanced, high-quality clinical research and innovations among common clinical diseases in India. He provides expert guidance at every step, consistently motivating his

students to elevate their work and translate their findings into impactful publications in highly respected, peer-reviewed indexed medical journals.

19. On the eve of Superannuation of Prof S. Vetrivel Chezian, 'A cadaveric workshop on important surgical approaches in extremities' with leading faculties was conducted with TNMC credit hours and TNMGR University credit points and accreditation certificates for the delegates. (Fig 18)

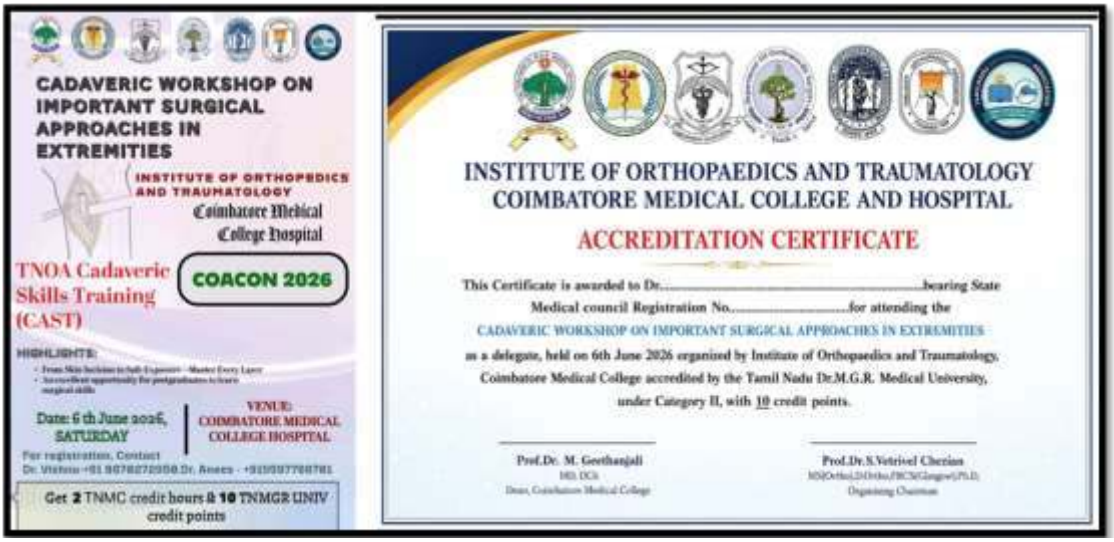

Fig 18: Poster and accreditation certificate for Cadaveric workshop on important surgical approaches in extremities

20. Out of Box thinking in improving academics in Orthopaedics:

 Founder of National orthopaedic postgraduate conference: Intentionally structured postgraduate conference to be highly cost-effective, removing financial barriers for young doctors while ensuring all paper presentations align rigorously with the latest National Medical Commission (NMC) curriculum.

Envisioned and launched the National Orthopaedic Post Graduate Conference first in India (Fig 19) as a premier platform for young surgeons to exchange knowledge, and established a rewarding framework of five prestigious medals and a Rs 10,000 cash prize to recognize exceptional scholars and celebrate clinical innovation. This made the post geaduates to have podium presentation and poster presentation in their place without much financial strain to them

 Coimbatore Orthopaedic Medical Education (COME): Founded, Spearheaded this ongoing initiative to host regular, high-yield Continuing Medical Education (CME) programs.

 Cost-Effective Cadaveric Workshops: Successfully organized advanced, hands-on cadaveric training for hip and knee arthroplasty, overcoming the traditionally high costs to make elite surgical training accessible for both postgraduates and senior consultants by coordinating with forensic medicine department. (Fig 20).

 Honoring Orthopaedic Legends: Instituted special CME awards and medals named after titans of the field—including Prof. Mayil Vahanan Natarajan and Prof. T.K. Shanmugasundaram—to inspire and uplift the next generation of orthopaedic talent (Fig 21).

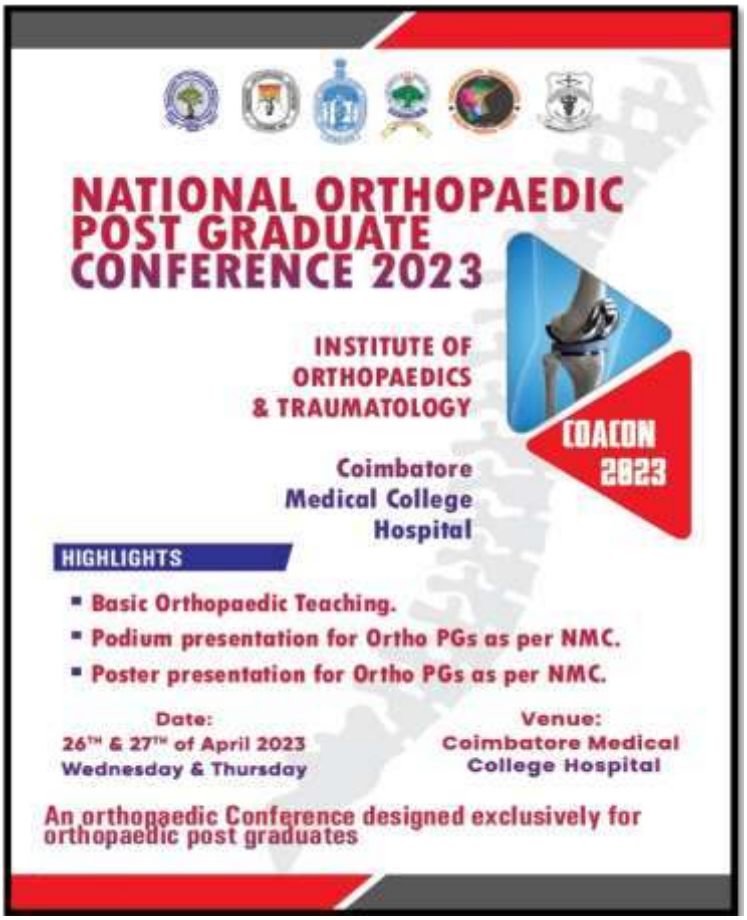

Fig 19: Organized COACON 2023 for the welfare of postgraduate Orthopaedic students

Fig 20: Organized Cadaveric workshop for hip arthroplasty

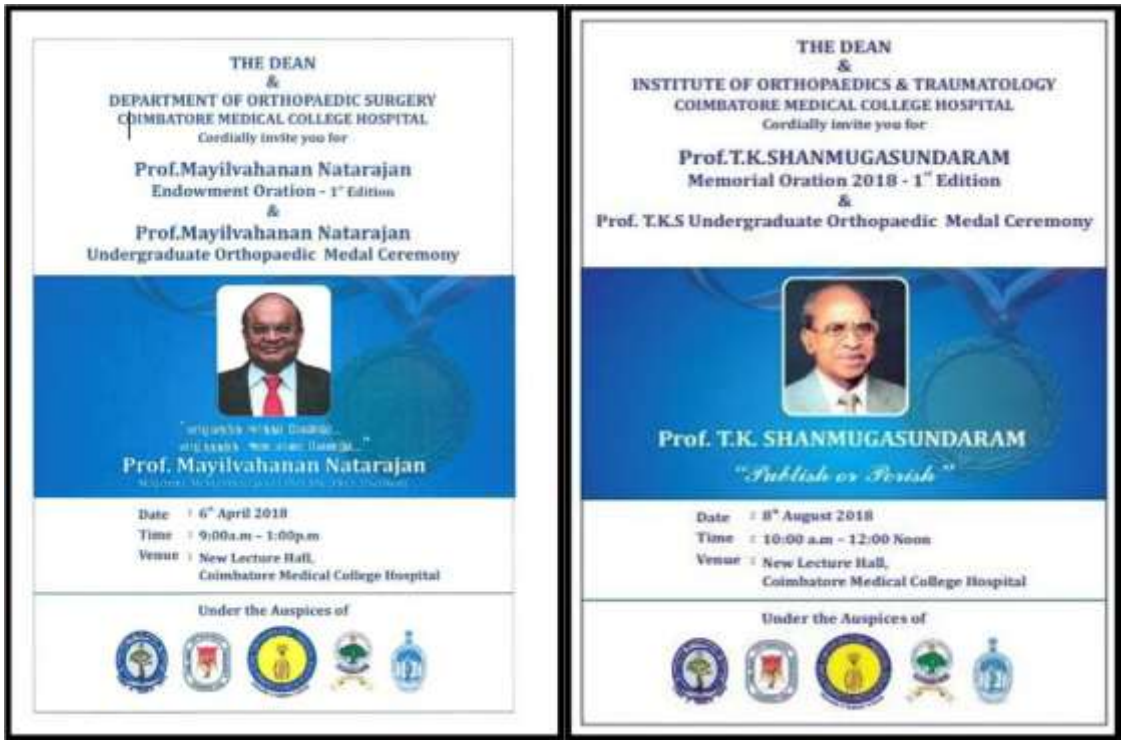

Fig 21: Conducted various CMEs to Honor Orthopaedic legends

CONCLUSION

The initiatives led by Prof. Dr. S. Vetrivel Chezian from 2010 to 2026 demonstrate that the limitations of a government hospital are often administrative, not insurmountable. By bridging these gaps through personal philanthropy, ergonomic innovations, and a focus on human dignity, he has created a scalable blueprint for clinical leadership. His tenure serves as a definitive role model for medical professionals across India, proving that compassionate, "out-of-the-box" thinking can successfully elevate public healthcare to international standards.

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