SBCN NEWS LETTER

A Newsletter of
Sree Balaji College of Nursing
Bharath Institute of Higher Education and Research
Chromepet, Chennai,Tamilnadu, India

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COLLEGE PROGRAMMES

INTERNATIONAL NURSES DAY CELEBRATION – 2026

Date: 12 May 2026
Venue: Sree Balaji College of Nursing
Organized by: Student Nurses' Association (SNA) Unit
Theme: *"Our Nurses. Our Future. Empowered Nurses Save Lives"*

Objectives

- To commemorate International Nurses Day and honor the contributions of nurses.
- To create awareness about the 2026 International Nurses Day theme.
- To encourage nursing students to uphold professional ethics, compassion, and leadership.
- To promote creativity and participation through academic and co-curricular activities.

Introduction



International Nurses Day is celebrated annually on 12 May to mark the birth anniversary of Florence Nightingale, the founder of modern nursing. The 2026 theme, "Our Nurses. Our Future. Empowered Nurses Save Lives," emphasizes that empowered, respected, and well-supported nurses play a vital role in saving lives, improving patient outcomes, and building resilient healthcare systems. The International Council of Nurses (ICN) highlighted the importance of strengthening the nursing workforce through quality education, leadership opportunities, professional development, and improved working conditions.

Programme Report

The International Nurses Day Celebration was organized by the Student Nurses' Association (SNA) Unit of Sree Balaji College of Nursing on 12 May 2026 with great enthusiasm and active participation from students and faculty members.

The programme commenced with a warm welcome, followed by the inauguration by Dr. V. Hemavathy, Principal, Sree Balaji College of Nursing. In her inaugural address, she emphasized the significance of International Nurses Day and highlighted the indispensable role of nurses in delivering quality healthcare. She motivated the students to uphold the values of compassion, commitment, professionalism, and ethical practice throughout their nursing careers.

The faculty members of the college addressed the gathering and shared their perspectives on the evolving role of nurses in modern healthcare. They encouraged

students to continuously enhance their knowledge, clinical competence, and leadership skills to meet future healthcare challenges.

Student nurses actively participated by sharing their experiences, reflections, and views on the nursing profession, emphasizing the importance of empathy, dedication, and patient-centered care.



Student nurses sharing their views and experiences on the nursing profession.

A Poster Presentation Competition was conducted to encourage creativity and raise awareness about the theme of International Nurses Day. Students presented informative and innovative posters highlighting the role of empowered nurses in strengthening healthcare systems and improving patient outcomes.



Evaluation of posters by the judging committee.

The posters were evaluated by the judging committee, and the winners were announced during the valedictory session. E-certificates were sent via email to all participants and prize winners in recognition of their enthusiastic participation and outstanding performance.



Students presenting posters based on the theme "Our Nurses. Our Future. Empowered Nurses Save Lives."

The programme concluded with a heartfelt vote of thanks expressing sincere gratitude to the Principal, SNA Advisor, faculty members, judges, student coordinators, and participants for their valuable support and cooperation in making the event a memorable success.



Group photograph of the principal, faculty members, SNA office bearers, and student participants.

Outcome

- Enhanced awareness about the significance of International Nurses Day.

- Motivated students to uphold professional values and ethical nursing practice.
- Encouraged creativity, teamwork, and effective communication through poster presentations.
- Reinforced the importance of empowering nurses to strengthen healthcare delivery and improve patient outcomes.

Conclusion

The International Nurses Day Celebration 2026 was a meaningful and inspiring event that recognized the invaluable contributions of nurses to society. The programme successfully reinforced the message that empowered nurses are the foundation of quality healthcare and a healthier future. The celebration inspired students to serve humanity with compassion, competence, and professional excellence.



FACULTIES ACADEMIC ACCOMPLISHMENT

IEEE PUBLICATION RECOGNITION- MAY -2026

We are proud to share that the conference proceedings containing the research work of the faculty members of Sree Balaji College of Nursing have been indexed in IEEE Explore highlighting their valuable academic contribution and commitment towards quality research and innovation.

Proceedings of the 6th International Conference on Image Processing and Capsule Networks (ICIPCN-2026)
IEEE Xplore Part Number: CFP26VY4-ART; ISBN: 979-8-3315-9981-2

Blockchain-IoT Model for Secure Data Management in Remote Physiotherapy Systems

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2026 6th International Conference on Image Processing and Capsule Networks (ICIPCN) | 979-8-3315-9981-2/26/$31.00 ©2026 IEEE | DOI: 10.1109/ICIPCN67432.2026.11438979

***Abstract*—Remote physiotherapy has garnered considerable interest due to its capacity to provide continuous rehabilitation and monitoring with Internet of Things (IoT)-enabled wearable devices. These technologies gather real-time mobility and health data, enabling physiotherapists to evaluate patient progress remotely. However, issues such as data manipulation, unauthorised access, and insufficient transparency hinder the dependability and uptake of existing cloud-based physiotherapy systems. This work presents a Blockchain-IoT architecture for safe data management in remote physiotherapy systems to overcome these concerns. The strategy incorporates IoT sensors for real-time patient monitoring with blockchain technology to provide data quality, authenticity, and traceability. Smart contracts are used to automate access control and provide safe data transfer among authorised parties. Experimental study reveals enhanced data security, transparency, and resistance to assaults, while ensuring low latency and efficient connectivity across IoT nodes. The proposed framework develops confidence among patients, therapists, and healthcare providers, facilitating the establishment of dependable and privacy-respecting tele-rehabilitation services within modern healthcare systems.**

***Keywords*—Blockchain, Internet of Things (IoT), Remote Physiotherapy, Data Security, Smart Contracts, Healthcare Management, Tele-rehabilitation, Data Integrity.**

I. INTRODUCTION

A system for remote physical treatment and rehabilitation is presented in this study that integrates decision trees (DTs) with IoT technology [1]. By integrating motion sensors and wearable technology, it develops individualised rehabilitation programs to help people with mobility impairments overcome their obstacles. Care is improved, results are improved, and healthcare professionals' workloads are reduced because of the system's ability to follow patient progress and adjust treatment. Using deep learning algorithms and posture detection technologies, this work provides an approach for remote health monitoring in physical therapy [2]. It improves results, decreases expenses, and increases engagement by giving patients and therapists feedback in real time. The technology improves patient care by keeping tabs on everyone's development over time, which in turn allows for targeted therapeutic treatments that boost the efficacy of treatment.

The safety concerns of telerehabilitation by addressing the issue of remote-control delays in exoskeleton-aided physiotherapy. The need for reliable teleoperated solutions is growing in response to the ageing and handicapped populations [3]. The study evaluates the lag time in virtual reality systems' communication using a mixed-methods strategy. Important results show that latency under 300 ms is acceptable, and that 6G networks and new communication protocols may improve this for better telehealth effectiveness. An innovative remote healthcare package is described in this work with the goal of bringing affordable, easily accessible, and accurately therapeutic physical therapy to the homes of the elderly [4]. Automated evaluation of workout concordance for patients is the goal of this methodology, which employs cutting-edge machine vision and machine learning methods for precise recovery of a patient's limb and joint postures during exercises.

Apps help both doctors and patients, which greatly improves healthcare technology [5]. AI, ML, and VR play an essential role in the therapeutic process. The use of these technologies improves patient care while reducing the workload of clinicians. As a result of people becoming more active, the need for physiotherapy services has grown. By facilitating the use of algorithms to provide proper exercise execution, medical technology aids physiotherapists in their work to improve the rehabilitation of orthopaedic patients and athletes. This study introduces a smart physiotherapy system that uses TinyML and IMU sensors to evaluate wrist

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Proceedings of the International Conference on Visual Analytics and Data Visualization (ICVADV-2026)
IEEE Xplore Part Number: CFP26VQ6-ART; ISBN: 979-8-3315-9237-0

Hybrid Deep Learning Approach for Accurate Early-Stage Diabetes Risk Prediction

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***Abstract*—Timely identification of diabetes is essential for preventing serious complications and enhance patient outcomes. This paper introduces a Hybrid Deep Learning Approach that integrates Convolutional Neural Networks (CNN) and Long Short-Term Memory (LSTM) networks for precise early-stage diabetes risk prediction. The proposed model utilizes CNN for automatic feature extraction from clinical and demographic data, while LSTM identifies temporal patterns and dependencies within patient records. The system was trained and assessed using the Early-Stage Diabetes Risk Prediction Dataset from Kaggle, comprising 520 cases and predictive attributes. Experimental findings indicate that the hybrid CNN–LSTM model attains an accuracy of 99.42% improving existing machine learning (ML) models. The model has strong generalization, with negligible overfitting in the training-validation performance curves. The results demonstrate that the integration of CNN and LSTM successfully captures spatial and sequential patterns in medical data, facilitating accurate early prediction of diabetes risk. This technology aids healthcare workers in proactive intervention strategies, hence enhancing illness management and prevention.**

Keywords*—*Early-Stage Diabetes, Diabetes Risk Prediction, Hybrid Deep Learning, Convolutional Neural Network (CNN), Long Short-Term Memory (LSTM), Clinical Data Analysis

I. Introduction

High blood glucose levels caused by insulin resistance, insufficient insulin secretion, or both characterise diabetes mellitus, a chronic metabolic disease that affects a large percentage of the population. Important consequences of diabetes, including cardiovascular disease, neuropathy, nephropathy, and retinopathy, can be avoided or postponed with prompt management and lifestyle changes made possible by early risk detection. Conventional methods of diagnosis frequently include professional interpretation of clinical parameters after extensive manual processing, which may be laborious, inaccurate, and time-consuming.

Predictive healthcare systems have been greatly improved in recent years with the inclusion of deep learning techniques and artificial intelligence (AI). When it comes to medical data, deep learning models such CNNs and RNNs have proven to be incredibly effective in spotting complex nonlinear patterns. However, there may be a wide variety of interactions between many health markers that cannot be fully captured by depending on a single model. As a result, a new and exciting approach to deep learning that combines many models is hybrid architectures, which have the potential to greatly enhance the accuracy and resilience of predictions.

By combining the advantages of CNNs with LSTM networks, this study presents a Hybrid Deep Learning Approach that can accurately predict the likelihood of developing diabetes in its early stages. CNNs efficiently extract top-level spatial characteristics from clinical datasets, whereas LSTMs capture patterns and relationships in patients' medical records over time. Healthcare providers will be able to make more informed judgements on proactive diabetes treatment with the help of the proposed model, which should improve classification accuracy and decrease the number of false predictions.

II. Related Works

ML techniques and family genetic information are improving the prediction of childhood diabetes [1]. After comparing five different models, Random Forest proved to be the most accurate. By improving generalisability through methods such as feature selection and noise addition, important health features can be identified for early risk detection. A hybrid algorithm model that incorporates both the Framingham approach and clinical rule augmentation forms the basis of this work [2]. Through the use of basic statistical knowledge, the integration of clinical principles for further improvement, and analysis of data such as participants' BMI, age, and insulin levels, the model is able to forecast the occurrence of diabetes. The KNN imputation method is used to preprocess inappropriate physiological indicators before the model is operated.

In order to determine what variables affect the likelihood of developing diabetes, this study uses an interpretable LightGBM model to make predictions, with the use of SHAP value-based analysis to clarify those predictions [3]. One major problem, though, is the lack of complete data at the

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SREE BALAJI COLLEGE OF NURSING
2026 – PATENT

YEAR	DESIGN PATENT		
	PROCESSING	PUBLISHED	GRANTED
2026	18	-	8
TOTAL	18	-	8

1.	11	18.5.2025	DR.R. NIMMI DR. SATHIYALATHA SARATHI MRS.S. PAPPY YUVARANI DR. PRIYADHARSINI MRS.DEEPA MRS.SARANYA MRS.ASHA CHRISTINA MRS, M. GAYATHRI	459298-001	POST-PARTUM PERINEAL CARE KIT	**DESIGN**	**7.5.2026**	GRANTED
2.		08/02/2026	MRS. ARIYA S KURUP	490276-001	COMPACT EMERGENCY MEDICATION STORAGE KIT	**DESIGN**	27/04/2026	GRANTED
3.		08/02/2026	MRS.BINIPAUL V J	488279-001	SMART MEDICATION CUP WITH TIME-MARKED COMPARTMENTS	**DESIGN**	14/05/2026	GRANTED
4.		14/02/2026	DR.S.SEMMALAR	487920-001	ERGONOMIC IV STAND WITH FOLDABLE MEDICINE TRAY	**DESIGN**	12/05/2026	GRANTED

SREE BALAJI COLLEGE OF NURSING

Sree Balaji College of Nursing was established in the year 1992, under Sri Lakshmi Ammal Educational Trust. Government of Tamil Nadu sanctioned permission to start B.Sc. Nursing degree programme for intake of 40 students per year. (Govt. of Tamil Nadu G.O.M.S.No.772/Health, Dt. 03.07.1992). now the intake per year is 100. College is recognized by Indian Nursing Council, New Delhi and Tamil Nadu Nurses and Midwives Council and it is affiliated to Bharath institute of Higher Education and Research University. College has collaborative arrangements with various other tie-up Hospitals and Community Health Centre to cater to the needs of the students.

COURSES OFFERED

Sree Balaji College of Nursing approved by the Indian Nursing Council and Tamil Nadu Nurses and Midwives Council and affiliated to Bharath institute of Higher Education and Research University; Chennai offers the following courses.

Collage is offering Bachelor of Science in Nursing and offers Master of Science of Nursing course with specialization in Medical Surgical Nursing, Child Health Nursing, Maternity Nursing, Community Health Nursing and Mental Health Nursing.

1. BACHELOR OF SCIENCE IN NURSING -B.SC. (NURSING)

Programme is 4 years course (Semester)including internship

2. MASTER OF SCIENCE IN NURSING -M.SC.(NURSING)

Programme Is 2 Years Course. We Have 5 Branches Of Study In M.Sc., (Nursing)

BRANCH - I: MEDICAL SURGICAL NURSING

BRANCH - II: PAEDIATRIC NURSING

BRANCH – III : OBSTETRIC & GYNAECOLOGICAL NURSING

BRANCH – IV : COMMUNITY HEALTH NURSING

BRANCH – V : PSYCHIATRIC NURSING

3. M.SC.(N) NURSE PRACTITIONER IN CRITICAL CARE NURSING (NPCC)s

4. POST BASIC B.SC NURSING

Programme Is 2 Years Course.

Available College Facilities

The College is situated in beautiful surroundings in a spacious ground with all infrastructural facilities. It has spacious auditorium, lecture halls, staff rooms, well equipped laboratories, spacious and well-equipped library, including Hostel facilities. At present College has1, 500 bedded parent Hospital at Chromepet, Chennai with all the specialities.

HOSTEL FACILITIES

The college has separate hostels for men and women. The hostel is available for boys and girls. Comfortable single, double and triple bed rooms are available in the hostel. Tasty and nutritious food

is served in the dining hall. You can opt for either vegetarian or non-vegetarian food. Foreign students can order food according to their preference.