



**Association of Indian
Universities**

Sri Balaji Vidyapeeth

**Academic & Administrative
Development Center
(AIU-SBVDU AADC)**

**Report on
AI TECHNOLOGY IN ALLIED
HEALTH SCIENCES
Transforming Healthcare
Practice**

M. Shivasakthy

Dr. Shivasakthy Manivasakan
Nodal Officer
AIU-SBVDU AADC
Sri Balaji Vidyapeeth

AUGUST 2026

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AI TECHNOLOGY IN ALLIED HEALTH SCIENCES

Workshop Chairperson:

Prof. Dr. A N Uma, Principal, School of Allied and Healthcare Sciences, SBV.

Nodal Officer:

Dr. Shivasakthy Manivasakan, Director, IHPE, Sri Baaji Vidyapeeth

The Association of Indian Universities – Sri Balaji Vidyapeeth Deemed to be University Academic and Administrative Development Centre (AIU–SBVDU AADC) organized the National Workshop on “AI Technology in Allied Health Sciences: Transforming Healthcare Practice” (Online Mode) This workshop was designed to provide comprehensive insights into the application of Artificial Intelligence technologies in Allied Health Sciences. The sessions covered key aspects of AI-driven innovations that are transforming healthcare education, clinical practice, and patient care. The program was guided by well renowned and experienced resource persons who shared their expertise on emerging AI tools and technologies relevant to allied health disciplines. This workshop offered an excellent opportunity for faculty members and paramedical professionals to enhance their knowledge and equip themselves with innovative technological approaches for teaching, learning, and clinical practice in the rapidly evolving healthcare environment.

Objectives of the workshop:

By the end of this 5-day workshop, participants will be able to:

- Introduce participants to the fundamental concepts and applications of Artificial Intelligence in the field of Allied Health Sciences.
- Familiarize allied health professionals with emerging AI-enabled healthcare technologies used in diagnostics, patient monitoring, and clinical decision-making.
- Enhance the capacity of educators and practitioners to integrate AI tools into teaching, research, and clinical practice.
- Encourage the adoption of innovative digital technologies to improve healthcare quality, efficiency, and patient outcomes.

Provide a platform for participants to interact with experts and gain insights into the future role of AI in allied healthcare education and practice.

Impact of AI in Allied Health Sciences – Prof. Dr. A N Uma



Dr. A.N.UMA

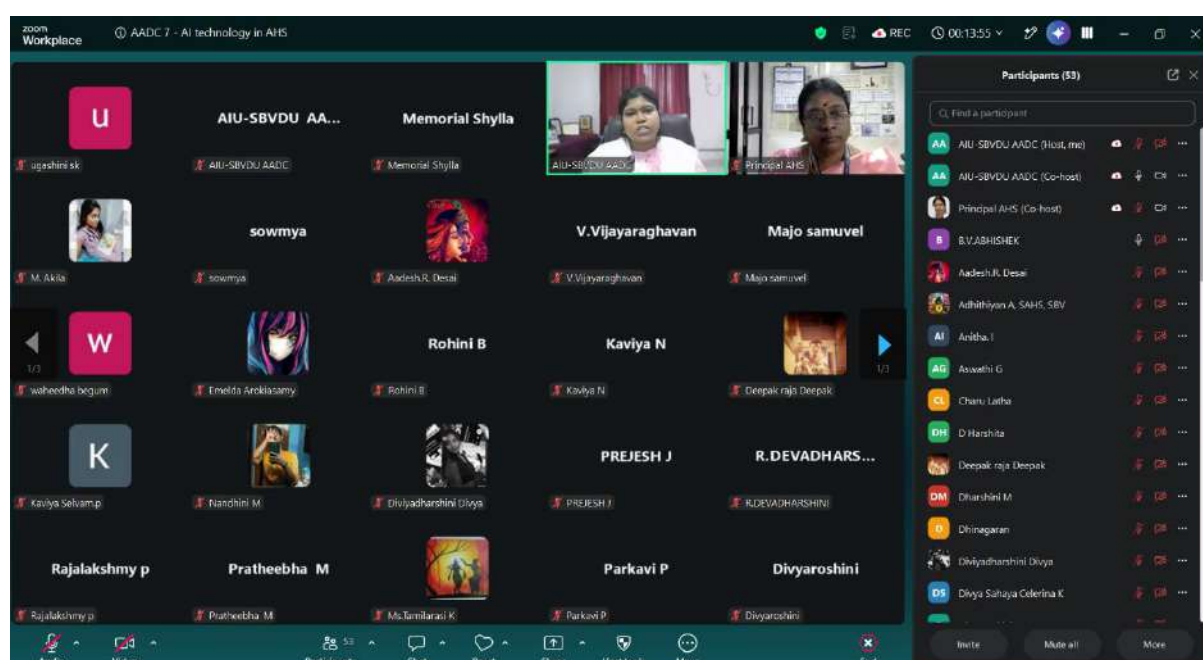
Head, Genetic Division, Anatomy Dept,
Principal, School of Allied Health Sciences, Sri Balaji Vidyapeeth,
Pondicherry.

Dr. A. N. Uma is Professor of Medical Genetics and Principal, School of Allied & Health Sciences, Sri Balaji Vidyapeeth, Puducherry, with extensive experience in Medical Genetics, Allied Health Sciences education, academic administration, research, curriculum development and quality assurance. She holds a Ph.D. in Biomedical/Medical Genetics, M.Phil. in Genetics, M.Sc. in Biomedical Genetics, B.Sc. in Botany, B.Ed. in Science and English, and M.A. in English. She has served as Principal, Principal-in-Charge and Vice Principal, with leadership responsibilities in academic administration, faculty management, student affairs, research supervision, accreditation and institutional development. She has spearheaded the development and copyrighting of innovative, competency-based UG and PG Allied Health Sciences curricula aligned with NEP 2020, UGC and NCAHP frameworks. Her research profile includes 102 articles listed in Google Scholar, including publications in Scopus-, Web of Science- and UGC-CARE-indexed journals, along with book and chapter contributions. She has received international, national and state-level best presentation awards and contributed to NAAC, NIRF and ISO 21001:2018 institutional initiatives. She is also actively engaged in NSS, rural outreach, community health, environmental initiatives and academic professional development.

Impact of AI in Allied Health Sciences – Summary

AI Workshop in Allied Health

The meeting opened with introductions for an AI Technology in Allied Health Sciences National Workshop scheduled from August 3-7, organized under the aegis of the Association of Indian Universities. Prof. Dr. A.N. Uma, the principal, highlighted the importance of AI in modern healthcare practice and introduced the workshop's resource speakers, including experts in various fields like cardiology, public health, clinical trial designs, ophthalmology, and simulation.

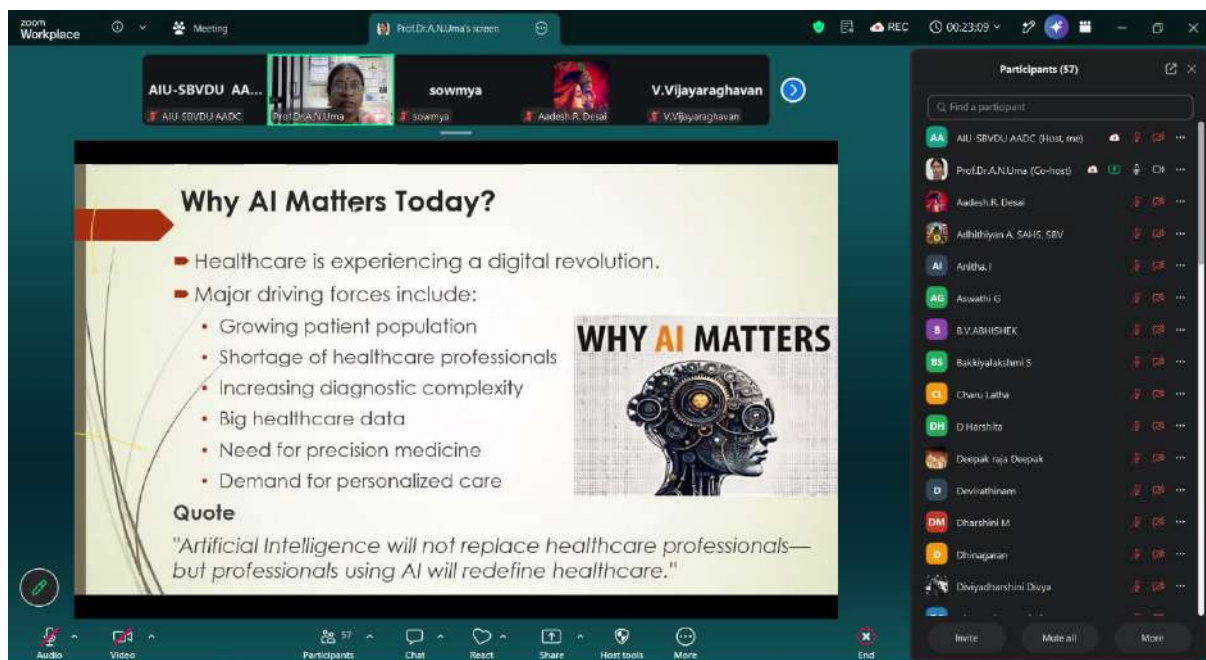


AI in Allied Health Sciences

Prof. Dr. A. N. Uma led a session on the impact of artificial intelligence in Allied Health Sciences, explaining how AI can transform healthcare practices through various components like learning from data, decision-making, pattern recognition, language understanding, and computer vision. She provided examples across different fields, including physiotherapy clinics using AI to predict rehabilitation outcomes for knee replacement patients and speech language pathologists leveraging natural language processing for therapy documentation. The session aimed to help participants understand AI fundamentals, applications in education and clinical practice, and future opportunities while addressing ethical and regulatory considerations.

AI Applications in Healthcare

Prof. Dr. A. N. Uma discussed the applications of AI in healthcare, focusing on computer vision, robotics, predictive analytics, and generative AI. She explained how AI can assist in areas such as wound care monitoring, robotic surgery assistance, predicting patient outcomes, and generating clinical documentation. The discussion highlighted the importance of AI in supporting healthcare professionals across various disciplines, including medical lab technology, radiology, physiotherapy, respiratory therapy, optometry, audiology, and nutrition, by enabling faster, more accurate diagnoses, personalized patient care, and improved treatment planning. Prof. Dr. A. N. Uma emphasized that while AI enhances clinical workflows, human oversight remains crucial for making final decisions and ensuring patient safety.



AI Integration in Allied Health

Prof. Dr. A. N. Uma delivered a comprehensive presentation on the integration of Artificial Intelligence (AI) in Allied Health Sciences, covering its applications in education, clinical practice, research, and patient care. She emphasized that AI should enhance rather than replace human expertise, clinical judgment, and empathy in healthcare. The session highlighted both the benefits and challenges of AI implementation, including personalized learning, improved diagnostic accuracy, and enhanced clinical workflows, while addressing concerns such as over-dependence on AI, data privacy, and ethical considerations.

AI The New Era in Diagnostic Technology



Dr. Kanishka Hrish Das is an Assistant Professor in Medical Microbiology at Chitkara School of Health Sciences, Chitkara University, Punjab, and Technical Manager of the NABL-accredited Water Analysis Laboratory. He holds a Ph.D. in Medical Microbiology from SRM Institute of Science and Technology, along with an M.Sc. in Medical Microbiology and B.Sc. in Medical Laboratory Technology. His expertise encompasses Medical Microbiology, Medical Mycology, clinical and diagnostic microbiology, molecular diagnostics, immunology and infectious diseases, with particular research focus on Candida infections, candiduria, biofilm formation, virulence factors and antifungal resistance. He has experience in culture and biochemical techniques, antimicrobial susceptibility testing, ELISA, PCR/RT-PCR and molecular laboratory methods, and currently supervises Ph.D., M.Sc. and B.Sc. research projects. He has authored several research publications in peer-reviewed journals, filed a patent on nanoparticle-based therapeutics for candiduria in diabetes mellitus, and contributed to the Erasmus+ funded PREVENT IT project. He has served roles including Ph.D. Supervisor, Doctoral Committee Member, Academic Mentor, APG In-charge, Library and Internship & Placement In-charge, and AHS NSS Coordinator. He has received a Best Poster Award for research on vulvovaginal candidiasis and actively contributes to academic programmes, scientific conferences, workshops and professional development activities.

AI The New Era in Diagnostic Technology – Summary

AI in Diagnostic Technology Presentation

Dr. Kanishka presented on the role of artificial intelligence in diagnostic technology, explaining how AI serves as a powerful partner in clinical decision-making rather than replacing healthcare professionals. The presentation covered AI applications in radiology, pathology, microbiology, and molecular diagnosis, including specific examples like detecting pneumonia on chest X-rays and identifying cancer cells in digital pathology. Dr. outlined the three main branches of AI - machine learning, deep learning, and generative AI - and discussed how AI addresses challenges in healthcare such as increasing patient loads, human fatigue, and diagnostic delays.

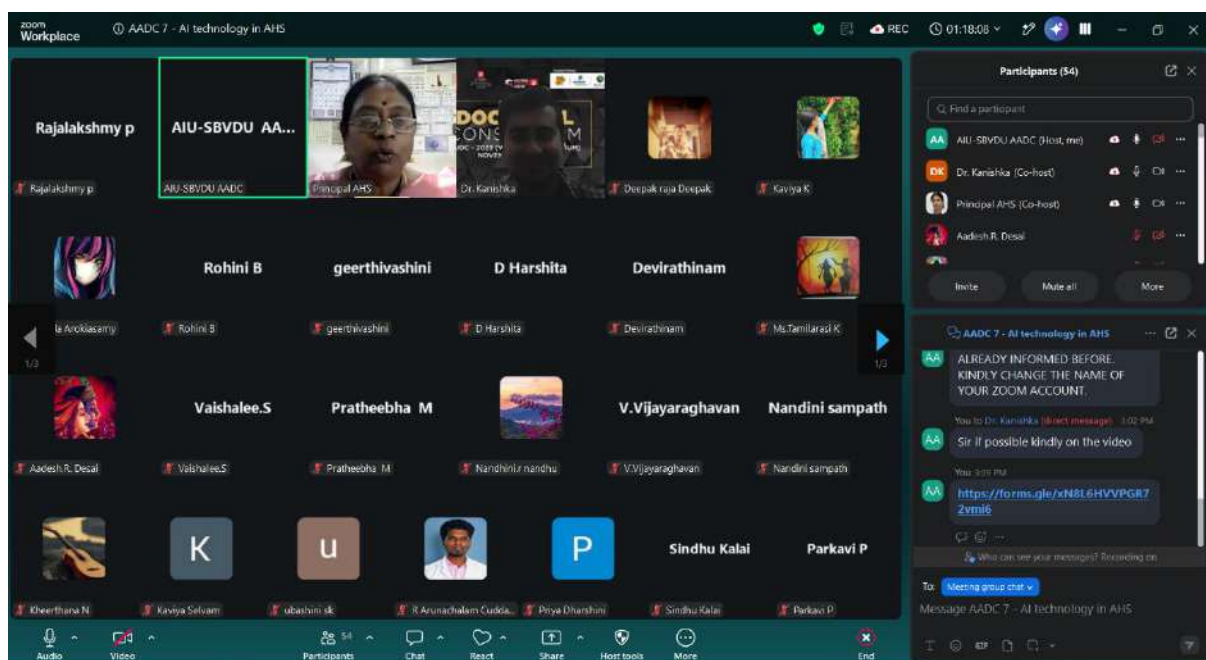


AI in Medical Diagnostics

Dr. Kanishka discussed the role of AI in various medical diagnostics, including radiology, pathology, microbiology, and molecular diagnosis. In radiology, AI is used for detecting abnormalities in CT and MRI scans, while in pathology, AI assists in cancer detection, histopathology analysis, and haematology. Dr. also highlighted AI's applications in microbiology for identifying bacterial species and in molecular diagnosis for interpreting complex genetic data. The discussion emphasized AI's potential to enhance accuracy, reduce turnaround times, and combat challenges like antimicrobial resistance and sepsis.

AI in Medical Diagnostics Applications

Dr. Kanishka discussed the applications of AI in medical diagnostics and genomics, highlighting its ability to reduce false positives and negatives, streamline high-throughput testing, and analyse large datasets efficiently. They explained how AI can assist in cancer genomic analysis, identify biomarkers, and support precision medicine by integrating data from various sources. Dr. also mentioned AI's role in predicting disease outbreaks, screening for tuberculosis, detecting malaria using smartphone microscopy, and monitoring high-risk sepsis patients.



AI in Healthcare Diagnostics

Dr. Kanishka discussed how AI is transforming diagnostic technology in healthcare through various applications including next-generation sequencing, variant interpretation, and biomarker detection. They explained that AI can assist with personalized treatment recommendations based on individual patient characteristics and help with pharmacogenomics for precision dosing. The doctor also covered specific AI platforms like CURE AI for radiology, Path AI and Page AI for digital pathology, and Google DeepMind's work in protein structure prediction and retinal image analysis. They highlighted the challenges in traditional diagnosis including manual data overload, prolonged turnaround times, and increased risk of human error due to higher patient volumes, emphasizing the need for AI to reduce administrative workload and improve diagnostic accuracy.

AI in Healthcare Applications

Dr. Kanishka discussed the clinical benefits of AI in healthcare, including rapid interpretation, early disease detection, and workflow automation. They highlighted limitations and challenges such as data privacy concerns, algorithm bias, and the need for explainable AI models. Dr. also outlined future applications of AI in healthcare, including digital twins for proactive monitoring, multimodal AI for comprehensive insights, and real-time biometric intelligence from wearable devices.

AI in Hospital Operations Integration

Dr. Kanishka presented on AI-driven hospital operations, including real-time neuron analysis, AI-powered clinical robotics, and connected diagnostic ecosystems. The presentation highlighted how AI can optimize patient care, reduce waiting times, and improve hospital efficiency through automated processes and dynamic resource allocation. Principal Dr. Uma thanked Dr. for the presentation and expressed concern about the limited integration of AI in the NCHP curriculum, particularly noting that only a few programs like medical imaging and medical lab technology include AI components, despite its importance for hands-on training of future healthcare professionals.

AI Integration in Medical Curriculum

The Principal and Dr. Kanishka discussed the integration of AI into the NCHPE curriculum for medical laboratory technology, with Dr. Kanishka highlighting the need to include AI and advanced diagnostic technologies in the syllabus. The principal agreed, emphasizing the importance of hands-on training for students across all allied health programs. They also discussed the potential for collaboration between AI companies and educational institutions to provide practical training opportunities. The session concluded with administrative notes about attendance and upcoming meetings.

Future of Physician Associates in the AI-Enabled Healthcare System - Mr. Jit Adhikary



Mr. Jit Adhikary

**Consultant & Faculty – Critical Care, Joint Head of Allied health sciences &
HOD – Physician Associate Program, Instructor of AHA & IRCF– ACLS & BLS Training
Program
Amrita Hospital Faridabad & Amrita Vishwa Vidyapeetham.**

Mr. Jit Adhikary is Consultant & Faculty – Critical Care, Joint Head – Allied Health Sciences (AHS), and HOD – Physician Associate Programme at Amrita Vishwa Vidyapeetham & Amrita Hospital, Faridabad. He is an Instructor with the Indian Resuscitation Council Federation (IRCF) and American Heart Association (AHA) for ACLS and BLS training programmes, with over a decade of experience in resuscitation training. He graduated from NH-Rabindranath International Institute of Cardiac Sciences, Kolkata, under NSOU, specializing in CTVS Critical Care, and holds a Master's in Public Health; he is currently pursuing his Ph.D. With 13 years of experience in CTVS Critical Care, he has previously worked at NH RTIICS, Kolkata, and served as Chief Physician Associate, Faculty and Head of Pre- and Post-CTVS Adult Intensive Care Unit at Medanta – The Medicity, Gurugram. He has presented papers nationally and internationally, received awards, organized conferences and workshops, and contributed articles on the Physician Associate profession in India. He is actively involved in research, academic activities and professional development. As Former Secretary of IAPA, he contributed to Physician Associate curriculum development, standardization, professional recognition and advancement in India.

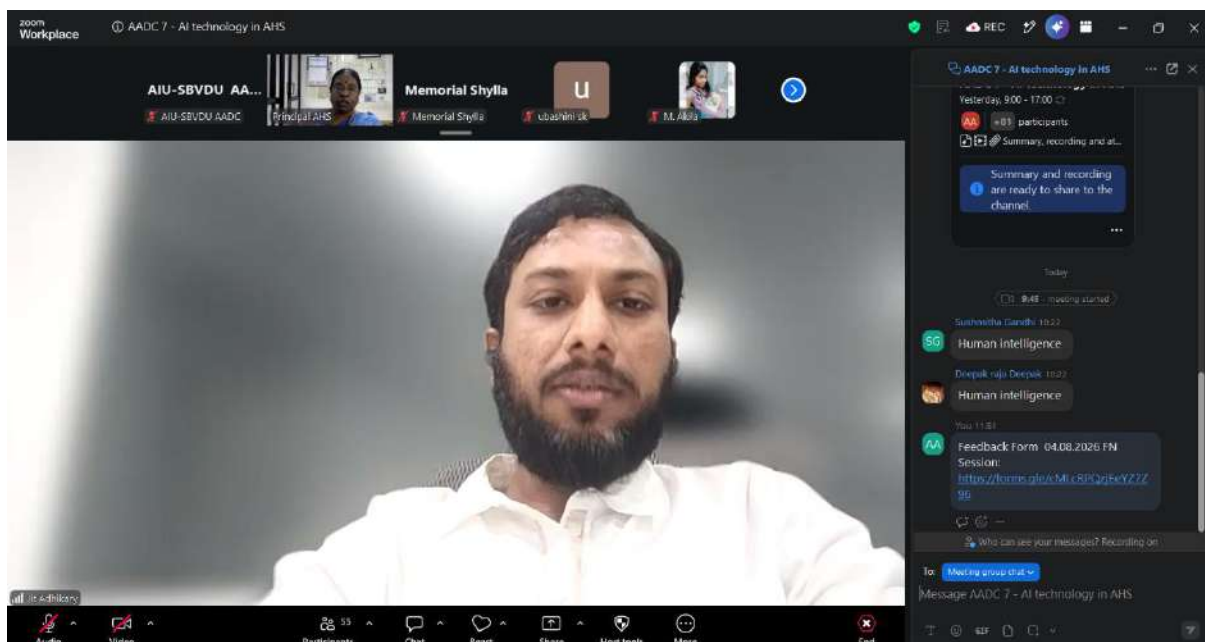
Future of Physician Associates in the AI-Enabled Healthcare System

- Mr. Jit Adhikary

Summary

AI in Healthcare Education

Mr. Jit Adhikari delivered a presentation on "The Future of Physician Associates in AI-Enabled Healthcare Systems" at a virtual conference. He discussed how AI is transforming medical education through personalized learning experiences, automated grading systems, and intelligent tutoring, while emphasizing that AI should complement rather than replace human intelligence. Jit addressed common concerns about AI replacing healthcare professionals, explaining that while robotic surgeries may reduce direct human involvement in some procedures, they still require human oversight and technical expertise. He also highlighted important challenges around data privacy and security in digital healthcare systems, stressing the need for careful data protection and ethical considerations in AI implementation.



Ethical AI in Education Applications

Jit discussed the importance of ethical AI practices, emphasizing that the responsible use of AI depends on human intention and mindset. He provided examples of AI applications in education, including tutoring systems like Khan Academy and how AI can support students and teachers in course planning, curriculum development, and

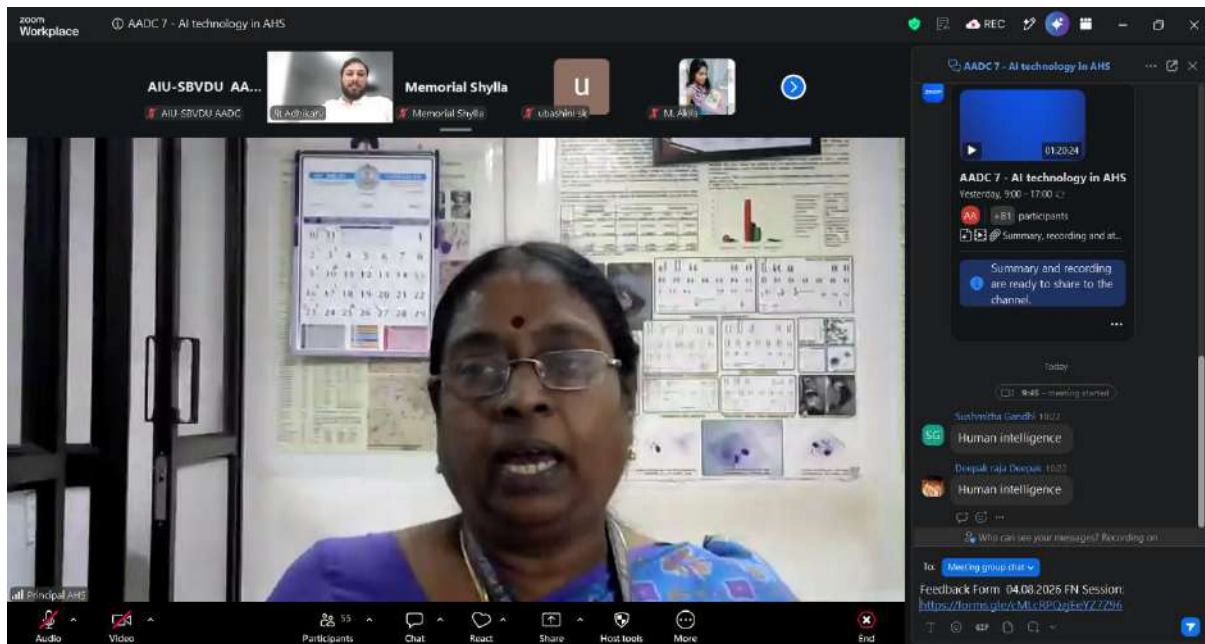
exam preparation. Jit also highlighted the potential of AI in medical education, such as using 3D images and videos to enhance understanding of complex medical procedures.

AI in Medical Education Benefits

Jit discussed the benefits and limitations of AI in medical education, explaining how AI can help students learn surgical procedures through video demonstrations and create realistic case scenarios across various specialties. He emphasized that while AI provides valuable educational support, it cannot replace human expertise and highlighted the importance of having backup systems due to potential technical issues. The discussion also touched on how institutions are using AI for administrative tasks, digital libraries, and curriculum development to enhance student learning and understanding.

AI in Medical Education

Jit discussed the role of AI in medical education and practice, explaining how AI tools and case studies help students develop diagnostic skills by presenting various possibilities for symptoms like abdominal pain. He emphasized that while AI can assist in minimizing errors and saving time, it should not be used blindly and human judgment remains essential, especially for rare or exceptional cases. Jit also highlighted the importance of human interaction in education and warned against over-reliance on technology, noting that physical presence and understanding students' individual needs cannot be fully replaced by digital tools. The session concluded with Jit sharing insights about success, emphasizing the importance of hard work, dedication, and resilience in achieving professional goals.



AI in Education Philosophy Presentation

Jit delivered a presentation on the philosophy of education, emphasizing the importance of nurturing character alongside career development, and shared insights on integrating AI tools like ChatGPT in teaching and administrative work. The Principal and other attendees provided positive feedback, discussing practical applications of AI in lesson planning and student learning, while highlighting the need for human oversight and proper use of technology. The conversation ended with plans for student exchange programs and future collaboration between the institutions, and attendees were directed to complete a feedback form.

Ethical and Legal Challenges of AI in Healthcare - Dr. Anandaraj. R



Dr. Anandaraj. R, MD (Community Medicine) is a Senior Assistant Professor in the Department of Community Medicine, Indira Gandhi Medical College & Research Institute, a Government of Puducherry institution, with nine years of academic experience. He completed his undergraduate medical education at MGMCRI, Puducherry, and postgraduate training at JJMMC, Karnataka. He holds several key administrative and programme responsibilities, including Administrative In-charge of the Urban Health Training Centre and Nodal Officer for NTEP, NTCP, NCORD, NSS and the Family Adoption Programme. He serves as Vice Chairman of the Puducherry NTEP State Task Force – Operational Research Committee and has completed a Fellowship in Infectious Disease Modelling at AIIMS Nagpur, where he also serves as a resource person. He is a Master Trainer in Artificial Intelligence in Medical Research, Operational Research, Epicollect5 mobile data capture software, TB Prodigy, Research Methodology and Mixed Methods Research. His areas of interest include tuberculosis, artificial intelligence, HIV, national health programmes, research methodology, immunization and non-communicable diseases. He has served as a WHO External Monitor for Measles-Rubella vaccination campaigns, Intensified Mission Indradhanush, TB-free status assessments under NTEP, TB-free Gram Panchayat initiatives and as a State Assessor for NQAS. He is actively involved in public health research, with projects supported by ICMR, Central TB Division, TB

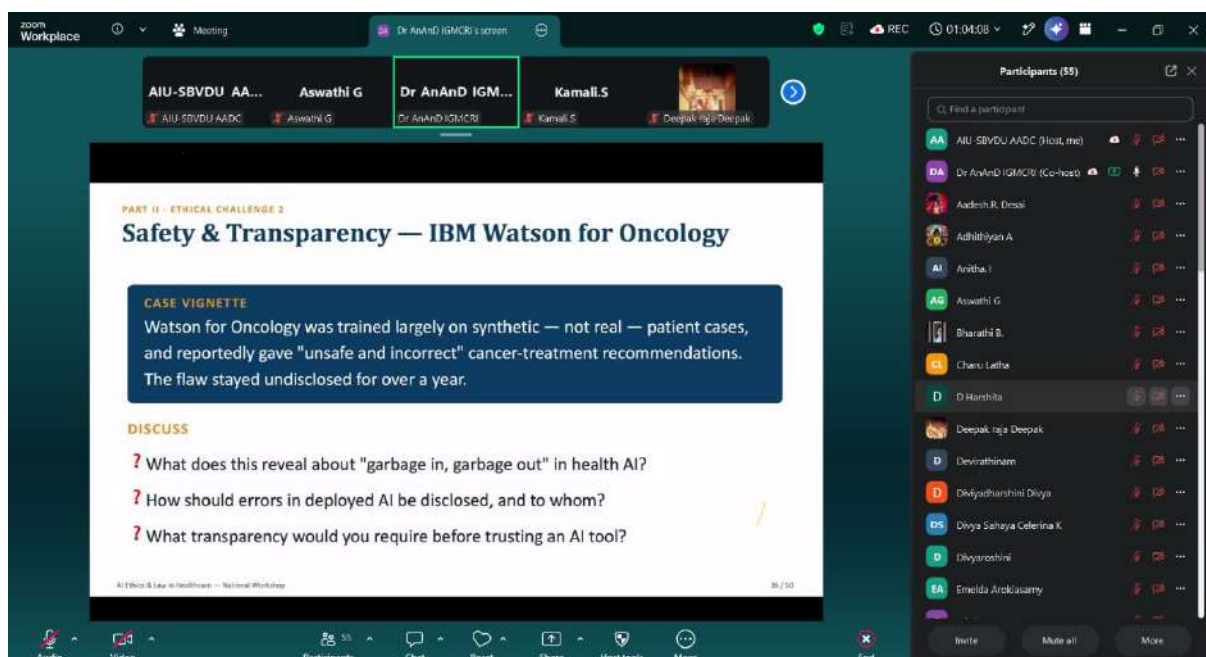
Association of India, MAMTA, RSSDI and Pondicherry AIDS Control Society, and has received recognition for academic excellence, including a rank in MD examinations and Best Paper Awards at scientific conferences.

Ethical and Legal Challenges of AI in Healthcare - Dr. Anandaraj. R

Summary

AI Ethics in Healthcare

Dr. Anand Raj Sar began a session on the ethical aspects and legal challenges of artificial intelligence in healthcare, focusing on regulatory guidelines from ICMR and examples of ethical challenges researchers might encounter. He explained that the session would cover legal frameworks from other continents and conclude with a checklist for researchers using AI technology. The presentation provided an overview of what constitutes artificial intelligence, including examples like chatbots and clinical decision support systems, and briefly touched on machine learning concepts.



AI Ethics in Medical Research

Dr explained the principles of machine learning and deep learning in medical contexts, highlighting the "black box" problem where AI systems cannot explain their decisions. They outlined four foundational pillars for biomedical research: autonomy, beneficence, non-maleficence, and justice, with particular focus on the importance of patient transparency regarding AI involvement in healthcare decisions. The discussion

emphasized the need for ethical considerations in AI implementation, including questions about legal responsibility and patient notification when AI systems make diagnostic decisions.

Ethical Principles for AI Healthcare

Dr discussed four ethical principles for AI in healthcare: respecting patient choices, ensuring AI improves health outcomes, avoiding harm, and ensuring fairness across different populations. They explained that while AI can assist healthcare professionals, the final decision responsibility must remain with human clinicians rather than the AI system itself, emphasizing the importance of the human-in-the-loop model to maintain patient autonomy and clinical oversight.

AI in Healthcare Ethics Discussion

Dr explained the human-in-the-loop model using a Google Maps analogy and discussed the importance of informed consent in AI-powered healthcare research. They emphasized the need to respect patient autonomy by allowing refusal of AI involvement and ensuring transparency in AI usage. Dr also covered safety measures, risk minimization, and the LERT framework (laws, ethics, reliability, validity, and transparency) for building trust in AI systems. The discussion included details about various Indian laws such as the IT Act, DISHA bill, Digital PDP Act, and Medical Devices Rules for protecting patient data and ensuring AI system trustworthiness.

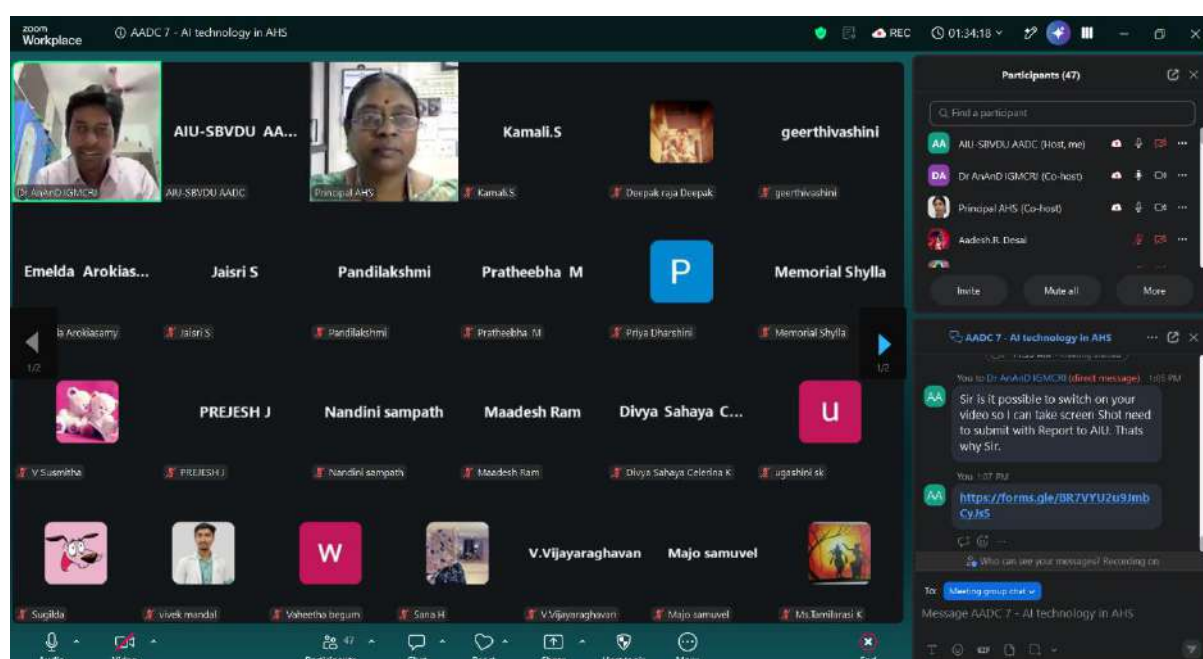
AI Healthcare Regulations in India

Dr explained that AI technologies in healthcare now fall under India's medical device rules, requiring both data protection and regulatory approval before market entry. They discussed accountability and liability frameworks, emphasizing that healthcare professionals and developers must be responsible for AI system errors and harms. The discussion covered data quality optimization through frequent training and bias prevention, along with the importance of placing AI systems at primary and secondary healthcare levels rather than in facilities with existing specialists.

AI in Healthcare Ethics Challenges

Dr. Anand presented on the ethical challenges and legal frameworks surrounding AI in healthcare, drawing examples from the US, Europe, and India. He highlighted key issues including the need for informed consent, algorithmic bias, data privacy, and

liability when using AI technologies in healthcare settings. Dr. Anand emphasized the importance of multidisciplinary teams in developing AI solutions and stressed the need for rigorous validation and transparency in AI implementation. He also discussed the evolving regulatory landscape in India and called for enhanced training of ethics committee members in AI. Principal Dr. Uma thanked Dr. Anand for the comprehensive presentation and noted the relevance of the LERT framework (Lawful, Ethical, Reliable, Transparent) to their ongoing work in AI implementation in healthcare.



AI Implementation in Healthcare Ethics

The principal discussed challenges with AI implementation in allied health science programs, noting that students and faculty often lack proper understanding of how to use AI tools effectively and ethically. Dr. explained key ethical considerations including the need for AI systems to undergo audit, proper validation, data security measures, and emphasized that healthcare professionals must maintain responsibility even when using AI tools. The principal expressed interest in having Dr. join their future ethics committee and requested guidance on setting up appropriate ethical protocols for student and faculty research projects.

AI in Cardiovascular Perfusion: Enhancing Safety and Precision in Cardiac Surgery - Mrs. Sowmya D



Mrs. D. Sowmya, Assistant Professor joined as tutor in the Dept. of SAHS, MGMCRI on 20.08.2018. She has completed her B.Tech. (Computer Science Engineering) in Manakula Vinayagar Institute of Technology (2010-2014) and she also completed Postgraduate M. Tech. in CSE under the specialization of Distributed Computing System in Pondicherry Engineering College (2014-2016). Currently doing her Ph.D. in Pondicherry University. She secured First Rank in PG Entrance Examination in Pondicherry Engineering College. She worked as an Assistant Professor for two years at Shri Krishnaa College of Engineering and Technology, Puducherry. She undergone in plant training at Lenovo and HCL technologies, Puducherry. And also completed her Industrial training at INFOSYS Solution, Bangalore. She was given the honour in being appointed as an IQAC Task force member and overall co-ordinator for SAHS, MGMCRI, SBV. Additionally, she was appointed as an "Assistant Controller of Examination" for SAHS, SBV. She has published 9 International Journal papers.

AI in Cardiovascular Perfusion: Enhancing Safety and Precision in Cardiac Surgery - Mrs. Sowmya D

Summary

AI in Cardiovascular Perfusion Workshop

Sowmya conducted a workshop on artificial intelligence in cardiovascular perfusion, focusing on how AI enhances safety and precision in cardiac surgery. She explained that AI assists healthcare professionals rather than replacing them, helping with continuous monitoring, early complication prediction, and personalized perfusion strategies. The presentation covered various AI applications in cardiovascular perfusion, including hypotension prediction, oxygen delivery optimization, and hemodynamic optimization, along with different AI algorithms like random forest, extreme gradient boosting, and deep learning used in cardiac surgeries.

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "Recent Research (2023–2026)". The slide contains a table with three columns: Year, Key Research Highlights, and Clinical Significance. The table lists research from 2023 to 2026. To the right of the main window, there is a sidebar showing a list of participants (57) and a search bar. The bottom of the screen shows the Zoom meeting controls.

Year	Key Research Highlights	Clinical Significance
2023	AI models successfully predicted postoperative complications such as hypotension, acute kidney injury (AKI), and mortality, helping identify high-risk patients before surgery.	Early risk prediction improves patient safety and treatment planning.
2024	AI and Computer Vision were used to analyze surgical videos, recognize surgical workflow, track instruments, and assess surgeons' technical skills.	Improves surgical accuracy, training, and quality of cardiac procedures.
2025	AI-assisted robotic cardiac surgery advanced significantly. Researchers demonstrated intelligent robotic assistance, and the first totally robotic heart transplant highlighted the future potential of robotic cardiac surgery.	Greater precision, minimally invasive surgery, less blood loss, and faster patient recovery.
2026	AI expanded into medical imaging, perioperative risk prediction, workflow optimization, Digital Twins, Explainable AI, and remote robotic cardiac surgery. Recent reviews also emphasized clinical validation and integration into routine cardiac surgery.	AI is moving from research to real clinical practice, supporting personalized, precise, and safer cardiac care.

AI Applications in Cardiac Surgery

Sowmya presented a comprehensive overview of AI applications in cardiac surgery, covering various algorithms including transformer models, CNN, LSTM, and reinforcement learning for different applications like ECG analysis, risk prediction, and clinical decision support. She detailed the cardiac surgery workflow, AI monitoring components, and digital twin technology that creates virtual patient copies for real-time predictions and simulations. Sowmya also discussed the ethical and regulatory considerations including patient privacy, algorithm bias, transparency, and the

importance of human oversight in AI-assisted decisions. The presentation concluded with current challenges in AI implementation and future prospects including AI-powered clinical decision systems and autonomous perfusion systems.

The screenshot shows a Zoom meeting interface. At the top, there are video thumbnails for participants: AIU-SBVDU AA..., Sowmya Devang, Principal AHC, Vaishalee.S, and vivek.mandal. The main screen displays a presentation slide titled "RANDOM FOREST".

RANDOM FOREST

Random Forest is an ensemble machine learning algorithm that combines multiple decision trees to improve prediction accuracy and reduce overfitting.

How it Works

- Creates many decision trees.
- Each tree analyzes different patient data.
- Trees vote for the final prediction.
- Majority vote becomes the final decision.

Applications in Cardiac Surgery

- Predict postoperative complications
- Detect hypotension
- Predict mortality risk
- Classify high-risk patients

Advantages

- ✓ High accuracy
- ✓ Handles missing data
- ✓ Reduces overfitting
- ✓ Easy to interpret

On the right side of the Zoom window, there is a "Participants (61)" list showing names like Suganya.G, Sugilda, Sushma Karan, Sushmita Gandhi, Ubashini sk, ugashini sk, V.Suarnitha, V.Vijayaraghavan, V.Indritha begum, Vaishalee.S, varsha.sathiyam, Vimalakilli Mounisamy, Viruthika, vivek.mandal, and Viveka.V. At the bottom, there are icons for Audio, Video, Participants, Chat, React, Share, Host tools, and More.

AI Applications in Cardiac Surgery

Sowmya presented on various AI applications in cardiac surgery, including IoT in medical devices, Edge AI for real-time data analysis, robotic cardiac surgery, federated learning for privacy protection, explainable AI for doctor understanding, and precision medicine for personalized patient care. She emphasized that AI enhances patient safety and clinical decision-making while supporting professionals rather than replacing them. The conversation ended with AIU-SBVDU requesting participants to complete feedback forms and maintain proper attendance to receive certificates for the session series.

Public Health & Outreach Technologies in the era of AI

Dr. B. Lavanya



Dr. B. Lavanya

MD. DNB

Assistant Professor, Dept. of Community Medicine
Aarupadai Veedu Medical College & Hospital, Puducherry

Dr. Lavanya B, MBBS, MD (Community Medicine), DNB (Community Medicine) is an Assistant Professor in the Department of Community Medicine at Aarupadai Veedu Medical College & Hospital, Puducherry, and a University Gold Medalist in MD Community Medicine. She has a strong academic and research profile with 20+ publications, including two publications related to Artificial Intelligence in healthcare and higher education, and has undertaken an ICMR-STs research project. Her research interests include Epidemiology, Tuberculosis, Artificial Intelligence in Healthcare and Public Health. She has received seven Best Paper/Oral Presentation Awards, one Best Poster Presentation Award, more than 10 other academic awards/prizes, a National-Level AI CHAMP Award, and a National-Level TB Prodigy title, along with multiple national-level quiz and essay recognitions. She was awarded the AI CHAMP Award at the national-level workshop “Transform Your Research with AI” in 2024, highlighting her interest and engagement in AI-enabled research. Her public health field experience includes WHO COVID-19 Vaccination External Monitoring, TB Active Case Finding and Subnational Certification activities, COVID-19 field response, Cholera Outbreak Investigation, and community-based tuberculosis research and field activities. Her profile reflects a strong combination of community

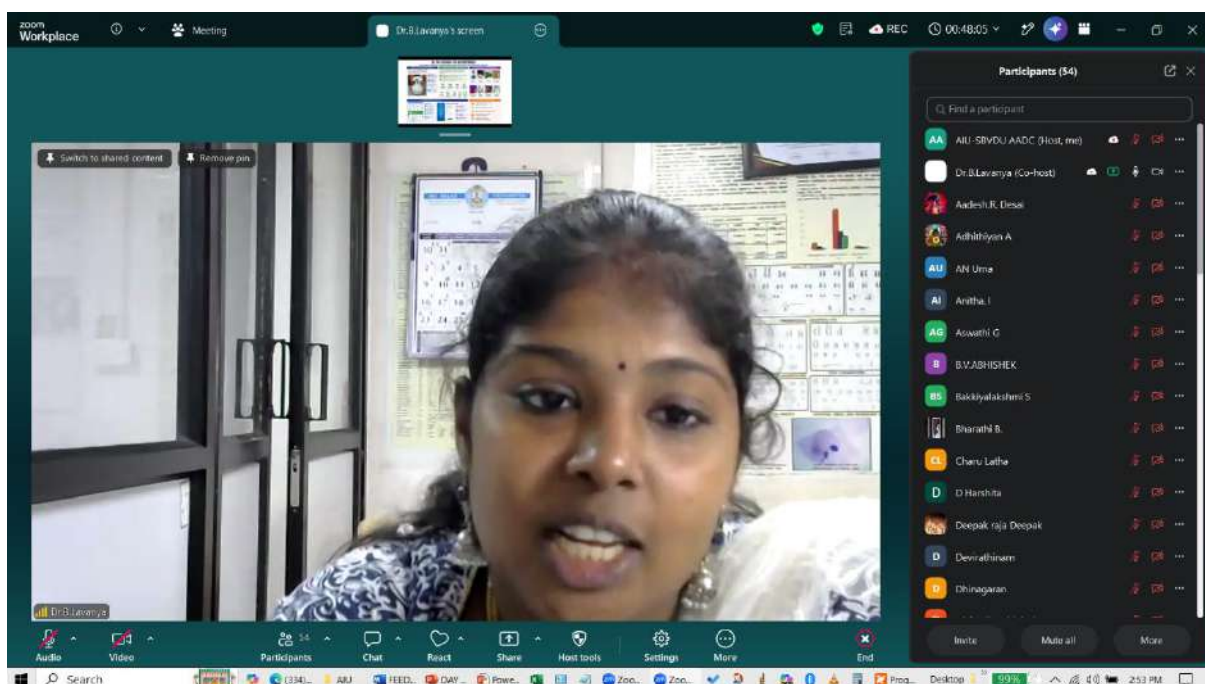
medicine, public health research, epidemiology, tuberculosis, academic excellence and emerging applications of AI in healthcare.

Public Health & Outreach Technologies in the era of AI - Dr. B. Lavanya

Summary

AI in Public Health Outreach

Dr. Lavanya presented on public health and outreach technologies in the era of artificial intelligence during the workshop's afternoon session. She explained that AI has three components: machine learning, natural language processing, and deep learning, and outlined how AI benefits healthcare through faster diagnosis, reduced human errors, decreased medical costs, and improved resource optimization. Dr. Lavanya discussed the evolution of public health outreach from paper-based data collection to digital systems, mobile health applications, and telemedicine, particularly highlighting how telemedicine helped address healthcare access in remote areas during the COVID pandemic.



AI in Public Health Applications

Dr. B. Lavanya presented on the role of artificial intelligence in public health, explaining how AI has transformed healthcare delivery by enabling remote specialist consultations and predicting outbreaks through data analysis. She outlined five key applications of AI in public health: predictive analysis for outbreak forecasting and

identifying high-risk populations, patient monitoring in remote areas, administrative efficiencies, patient education and engagement, and addressing social determinants of health. Dr. Lavanya described how AI could integrate multiple data sources including weather conditions, health surveillance systems, and historical outbreak data to identify early hotspots and guide healthcare professionals in targeting interventions effectively.

AI in Healthcare Applications

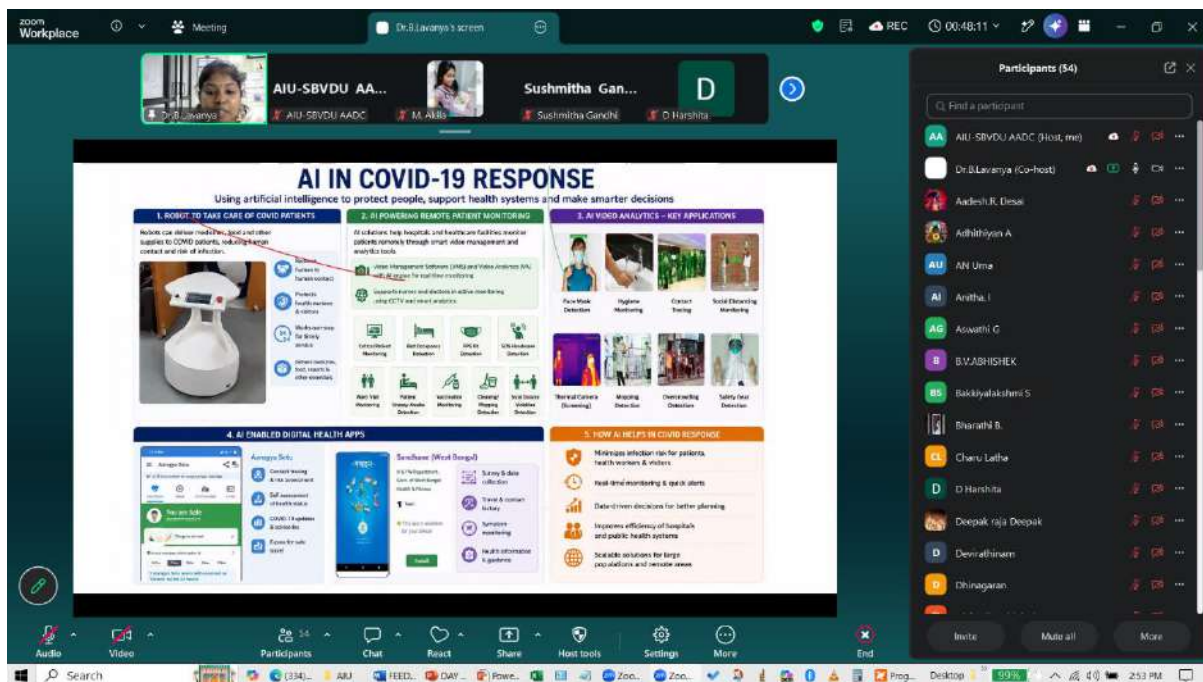
Dr. B. Lavanya discussed the role of AI in healthcare, focusing on three key areas: prediction, monitoring, and chatbots. She explained how AI can aid in identifying high-risk populations and predicting outbreaks, as well as monitoring vital signs and health data through digital devices and apps like the Kilkari app for pregnant women. Dr. Lavanya also highlighted the use of AI-powered chatbots and the UWIN app for immunization reminders, emphasizing the benefits of multilingual support and personalized health education.

AI in Healthcare Advancements

Dr. B. Lavanya discussed the advancements in AI technology for healthcare, including multilingual support for text, voice, and video chat capabilities. She explained how AI can analyse social determinants of health, such as housing conditions, food security, transportation access, and healthcare facilities, to identify gaps and recommend resources to address them. Dr. B. Lavanya also described how AI can forecast healthcare resource needs during outbreaks by analysing historical data and predicting surges in cases, helping to prepare for and prevent shortages.

AI in Healthcare Management

Dr. B. Lavanya discussed how AI can help in vaccine management by predicting requirements, determining distribution, and ensuring proper cold chain management. She explained AI's ability to simulate different response scenarios for disease outbreaks, allowing healthcare providers to select the most effective approach. Dr. Lavanya also described how AI can automate administrative tasks like scheduling appointments, generating reports, and conducting triage, reducing the burden on human resources and improving efficiency in healthcare delivery.



Digital Health Assistance Tools Overview

Dr. B. Lavanya presented a range of digital health assistance tools and chatbots designed to address diverse healthcare needs. She highlighted Florence for tobacco cessation, SARA for general health assistance, and the WHO chatbot for breast cancer-related information. She also introduced Televanas and the ASME app for mental health support and Aishman Sahadi for addressing PMJAY insurance-related queries. In addition, she discussed AI-enabled tools for diabetes management, including Misty and the mDiabetes app, which support personalized dietary planning, exercise recommendations, and medication tracking.

Digital Health Tools for Diabetes

Dr. B. Lavanya presented on several digital health tools for diabetes management and tuberculosis detection. She explained how the mDiabetes app would send reminders for medication and screenings, while the NeuroTouch device could assess diabetic neuropathy through multiple tests connected to mobile phones via Bluetooth. Dr. Lavanya also discussed calorie tracking apps including Calorie Mama and others like CalAI, SnapCalorie, Foodvisor, and MyFitnessPal, which use AI to analyze photos of food and provide nutrition information. Finally, she described the QXR AI system for chest X-ray analysis in tuberculosis detection, which can operate without a radiologist present and achieves over 90% accuracy in detecting abnormal chest conditions.

AI Applications in Healthcare

Dr. B. Lavanya presented various applications of AI in healthcare, including AI-assisted diagnosis in remote areas, eye screening using retinal imaging devices, anemia detection through conjunctiva photo analysis, and COVID-19 management using robots and video management software for contact tracing and thermal screening. She also discussed AI's role in breast health through a thermographic solution called Nirai Mai, which allows for early detection of breast cancer through thermal scanning from a separate room while maintaining patient privacy.

AI Tools for NCD Prevention

Dr. B. Lavanya discussed various AI tools and technologies for non-communicable disease (NCD) screening and prevention, including thermal scanning for breast cancer detection, portable ECG devices for arrhythmia detection, and the use of Google search data for disease surveillance. She explained how AI plays a role across four levels of prevention: primordial (preventing risk factors), primary (preventing disease occurrence), secondary (early diagnosis), and tertiary (management of established disease). The discussion highlighted specific examples like the Calorie Mama app for mindful eating and mDiabetes app for risk assessment, as well as chatbots like Florence and Sarathi for lifestyle guidance.

AI in Disease Prevention

Dr. B. Lavanya discussed the role of AI in different levels of disease prevention, including primary, secondary, tertiary, and quaternary prevention. She emphasized that while AI can analyse data and detect patterns, human verification and interpretation are essential to ensure accurate risk assessment and decision-making. Dr. B. Lavanya also explained the difference between black box AI and explainable AI, highlighting the importance of understanding AI predictions and ensuring quality data input for responsible AI use.

AI in Public Health Infrastructure

Dr. B. Lavanya discussed the importance of accurate data, proper infrastructure, and AI literacy in public health, emphasizing the need for strong digital backbone, connectivity, and security. She highlighted key challenges including data privacy issues, bias, and the lack of trained staff and proper governance.

AI In Clinical Trial Design - Dr. Vimala Ananth A



Dr. Vimala Ananth A

Professor

Department of Pharmacology

Mahatma Gandhi Medical College and Research Institute, Sri Balaji Vidyapeeth, Puducherry

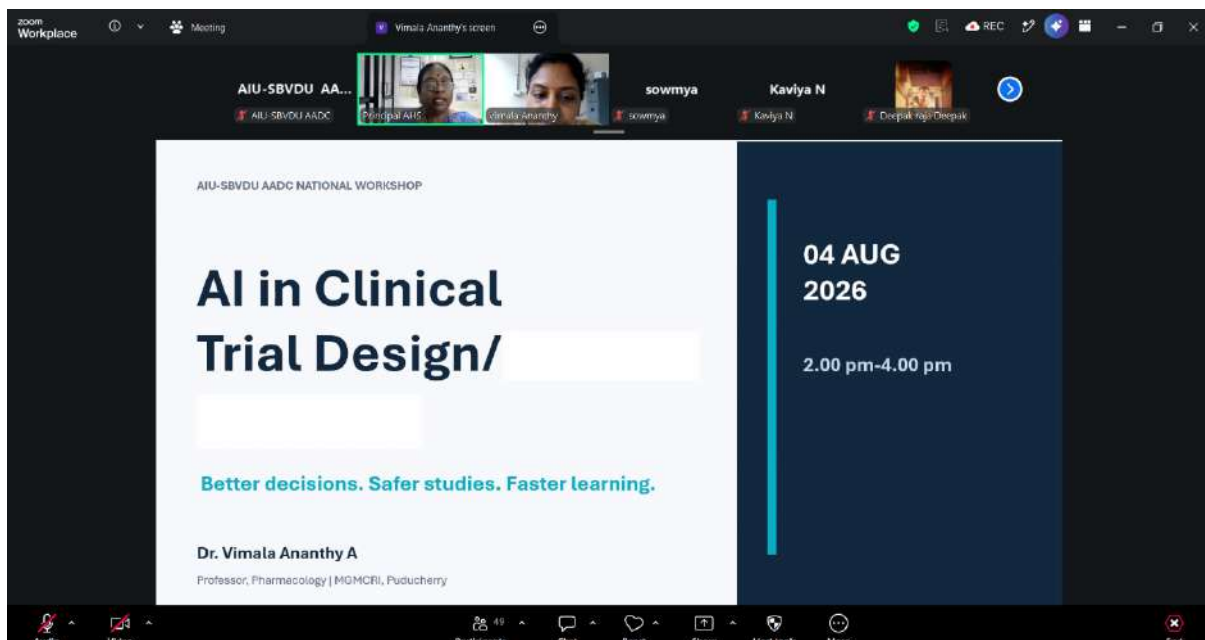
Dr. Vimala Ananth A, MBBS, MD, DNB (Pharmacology) is a Professor of Pharmacology at Mahatma Gandhi Medical College and Research Institute (MGMCRI), Puducherry, with 12 years of teaching experience in undergraduate and postgraduate medical education. She completed her MD in Pharmacology from JIPMER, Puducherry, followed by DNB in Pharmacology from the National Board of Examinations. Her academic and research interests include Clinical Pharmacology, Pharmacovigilance, Medication Safety, Clinical Research, Medical Education, Rational Use of Medicines and Preclinical Pharmacology. Her expertise encompasses pharmacology teaching, research methodology, adverse drug reaction monitoring, therapeutic drug monitoring, drug information services, research protocol development, statistical analysis and innovative teaching-learning methods. She has authored/co-authored 30 publications and book chapters in pharmacology, clinical research, medical education, antimicrobial use, drug safety and preclinical research. She has received several academic recognitions, including Best Prize at JIPMER Scientific Society, Best Paper at JIPMER Research Day, and awards for poster and paper presentations. She has served as Organizing Secretary of HOLA 22, organized National Pharmacovigilance Week, contributed as a resource person for undergraduate medical education programmes, and served as quiz master and judge for academic competitions.

AI In Clinical Trial Design - Dr. Vimala Ananthiy A

Summary

AI in Clinical Research Workshop

Dr. Vimala conducted a workshop on AI in clinical research and clinical trial design, using a fictional stroke rehabilitation study as an example to demonstrate AI applications. The session focused on understanding appropriate AI applications in clinical research, including tasks like literature search, eligibility screening, data cleaning, and report writing, while addressing potential limitations and biases in AI outputs.

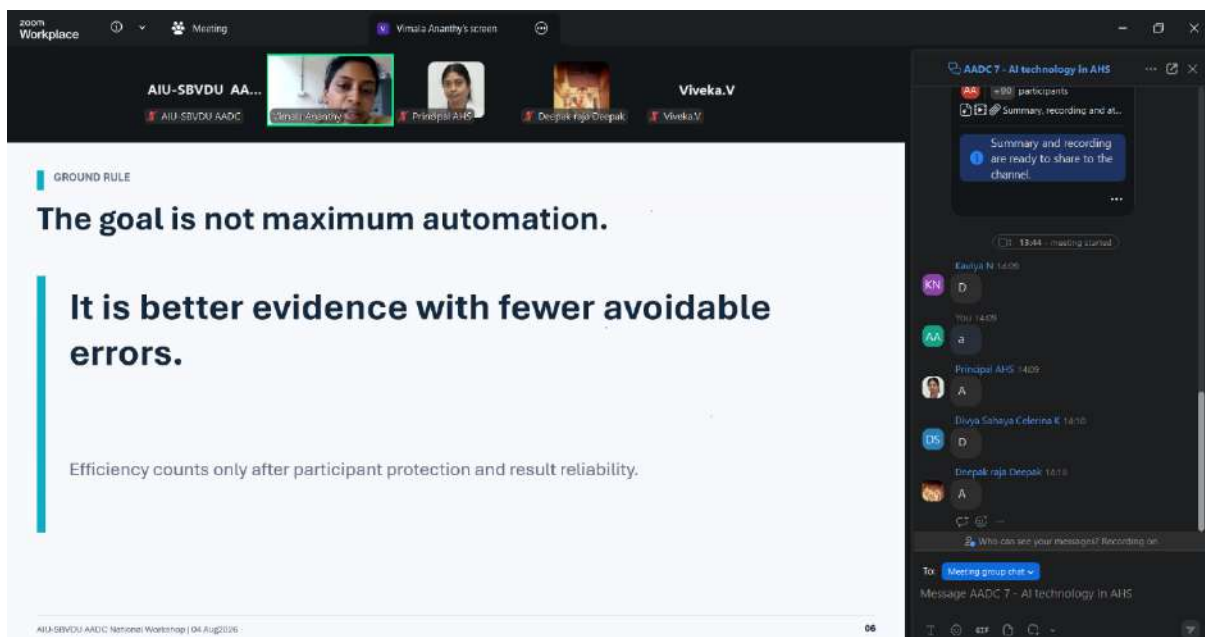


AI in Clinical Trials Discussion

Dr. Vimala discussed the role of AI in clinical trials, explaining that AI can be used for both operational support (such as formatting text and deduplication) and as an intervention in clinical research. She emphasized the importance of distinguishing between these two approaches, as different guidelines apply depending on whether AI is used as an operational tool or as an intervention. Dr. Vimala also introduced the PICOT framework (Population, Intervention, Comparator, Outcome, and Time) as a tool for framing clear and testable research questions, which is essential for effectively utilizing AI in clinical trial design.

AI in Clinical Research Protocols

Vimala discussed the role of AI in clinical research protocol design, explaining how AI can help conduct stress tests to identify potential ethical issues, participant protection concerns, and operational feasibility problems. She emphasized the importance of properly structuring prompts for AI, including specifying the research context, task requirements, and desired output format with evidence sources.



AI Guidelines in Clinical Research

Vimala discussed guidelines for using AI in clinical research, emphasizing the importance of setting clear thresholds and limits for AI outputs rather than allowing it to invent criteria. She outlined a comprehensive verification process including source checks, logic checks, clinical checks, statistical checks, and accountability measures before accepting AI-generated outputs for inclusion and exclusion criteria. Vimala also covered the proper use of AI for sample size calculation, stressing that researchers should understand the underlying formulas and statistical values rather than treating AI as a black box for calculations.

AI in Clinical Studies Best Practices

Vimala discussed the importance of using AI responsibly in clinical studies, emphasizing the need for proper sample size calculations and protocol review to identify potential weaknesses. She explained how AI can assist with participant recruitment through tools like Trial GPT, which helped reduce screening time by 42.6%

in a previous study. Vimala also covered the use of AI in drafting informed consent forms and stressed the importance of maintaining clear records of all AI-assisted decisions in clinical trials.

AI in Clinical Data Management

Dr. Vimala discussed the appropriate and inappropriate uses of AI in clinical data management and research. She explained that AI can assist with data duplication detection, coding suggestions, outlier identification, and classification but should not be used for overwriting source data, introducing missing data, suppressing adverse events, changing endpoint windows, or generating implausible values. Dr. Vimala emphasized that AI should be used responsibly, with proper validation, oversight, and transparency, particularly when used as an intervention in clinical studies, where specific guidelines like SPIRIT AI or CONSORT AI must be followed.

AI in Clinical Research Guidelines

Dr. Vimala discussed the role of clinical researchers remain responsible for participant protection, scientific validity, and integrity of evidence. She outlined various guidelines for using AI in clinical research, including ICH E6R3 guidelines, ICMI ethical guidelines, and FDA considerations for AI in drug development. Dr. Vimala then demonstrated several AI tools specifically designed for scientific research, including Elicit and Consensus for literature search and paper discovery, Research Rabbit for connected paper networks, and Rayon for systematic reviews and meta-analyses.

AI Tools for Clinical Research

Dr. Vimala presented on six AI tools for clinical research, including deduplication software for systematic reviews and a CITE interface for checking article citations. She emphasized the importance of using proper prompts with AI to ensure scientifically valid outputs and stressed that researchers should own the final decisions rather than letting AI make them. The principal praised Vimala's comprehensive presentation and noted that the session would be valuable for both students working on clinical research projects and faculty planning faculty projects.

Recent Advances in Ophthalmology - Dr. K. Jayalatha



Dr. K. Jayalatha

MBBS, DO, DNB

Phaco & Glaucoma Surgeon & Medical Retina Specialist.
Puducherry

Dr. K. Jayalatha, MBBS, DO (Ophthalmology), DNB (Ophthalmology) is a senior ophthalmologist with 32 years of post-MBBS experience and 25 years of ophthalmic experience, having trained at JIPMER, Puducherry, and Aravind Eye Hospital & Post-Graduate Institute of Ophthalmology, Tirunelveli. She has served in leading ophthalmic and medical institutions across Puducherry, Tamil Nadu and Villupuram, including Dr. Agarwal's Healthcare Ltd., Jothi Eye Care Centre, SLIMS, Vee Care Eye Hospital, Aravind Eye Hospital, PIMS and JIPMER. She has performed approximately 81,300 surgeries, including 62,000 cataract surgeries (Phaco and SICS), besides extensive glaucoma and anterior segment procedures. She is an experienced Phaco, Glaucoma and Medical Retina specialist, with expertise in advanced ophthalmic surgeries, ocular emergencies and laser procedures including PRP, focal and grid photocoagulation, laser iridotomy, YAG capsulotomy and trabeculoplasty. She has held senior leadership responsibilities including Head of Hospital, Senior Consultant and clinical decision-maker, and has conducted academic programmes, CME activities, staff training and public awareness programmes for doctors, nurses, technicians, optometrists, ophthalmic assistants and interns. She has also contributed to scientific publications, exhibits and national and international conferences, reflecting her continued commitment to clinical excellence, academic development and professional education in ophthalmology.

Recent Advances in Ophthalmology - Dr. K. Jayalatha

Summary

AI in Ophthalmology Advances

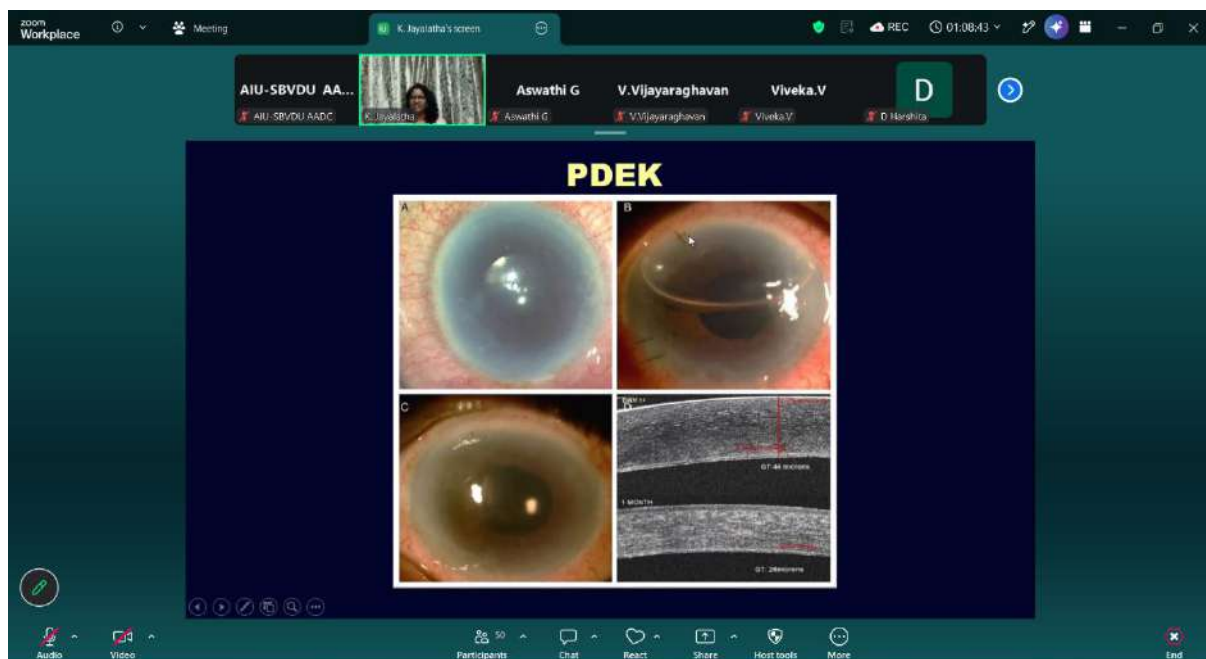
Dr. Jayalatha delivered a presentation on recent advances in AI and robotic influence in ophthalmology, covering common eye diseases including refractive errors, cataract, diabetic retinopathy, glaucoma, ARMD, and amblyopia. She explained the characteristics and treatment approaches for myopia, hypermetropia, astigmatism, and presbyopia, emphasizing the crucial role of optometrists in vision examination and refraction processes. Dr. Jayalatha highlighted the importance of optometrists in supporting ophthalmologists' evaluations and described presbyopia as a physiological change related to aging that affects lens elasticity.



Role of Optometrists in Eye Care

Dr. Jayalatha discussed the vital role of optometrists in eye hospitals, outlining diagnostic tools and corrective measures including glasses, contact lenses, yogic exercises, and various laser surgeries. They explained the causes and treatments of squint and cataracts, emphasizing the importance of early detection and surgical intervention. K. also detailed the evolution of cataract surgery from ancient couching

techniques to modern phacoemulsification procedures, highlighting the advantages of recent advancements like small incision cataract surgery and foldable IOLs.



Advancements in Multifocal IOLs and DR

Dr. Jayalatha discussed advancements in multifocal IOLs, including various lens types like Technis Multifocal, Symphony, and Restored, and explained the recent technological breakthrough of glued IOLs for patients without posterior capsular support. They also covered diabetic retinopathy, describing the progression from mild to severe stages and emphasizing the importance of early detection and proper diabetic management to prevent irreversible vision loss. K. stressed the need for awareness and regular check-ups for diabetic patients to control progression and improve outcomes.

Eye Conditions and Treatments Overview

Dr. Jayalatha discussed various eye conditions and treatments, focusing on diabetic retinopathy and glaucoma. They explained the importance of early detection and treatment of diabetic retinopathy, including the use of FFA (fundus fluorescent angiogram) to identify leaks and capillary non-perfusion areas. K. outlined treatment options for diabetic retinopathy, such as retinal laser therapy, anti-VEGF injections, and intravitreal steroids, emphasizing the need for prompt intervention to preserve

vision. They also covered glaucoma, describing optic nerve damage caused by raised intraocular pressure and explaining diagnostic methods like gonioscopy and Humphrey field analysis. Dr. Jayalatha discussed various treatment approaches for glaucoma, including medical treatments, laser therapy, and surgical options like trabeculectomy and shunt implants. The presentation concluded with a brief mention of advancements in dacryocystitis treatment, pterygium surgery, and the importance of eye donation.

AI Transformation in Eye Care

Dr. Jayalatha delivered a comprehensive lecture on the transformation of eye care through artificial intelligence, covering recent advancements in ophthalmology and cataract surgery over the past decade. She explained how AI technologies assist in early disease detection, accurate diagnosis, personalized treatment planning, and robotic-assisted surgeries, while emphasizing that AI should augment rather than replace ophthalmologists' expertise.

AI Tools in Allied Health Sciences Research - Mr. Sourav Das



Mr. Sourav Das

Assistant Professor (Med. Micro)

School of Allied & Healthcare Sciences, Sri Balaji Vidyapeeth, Puducherry

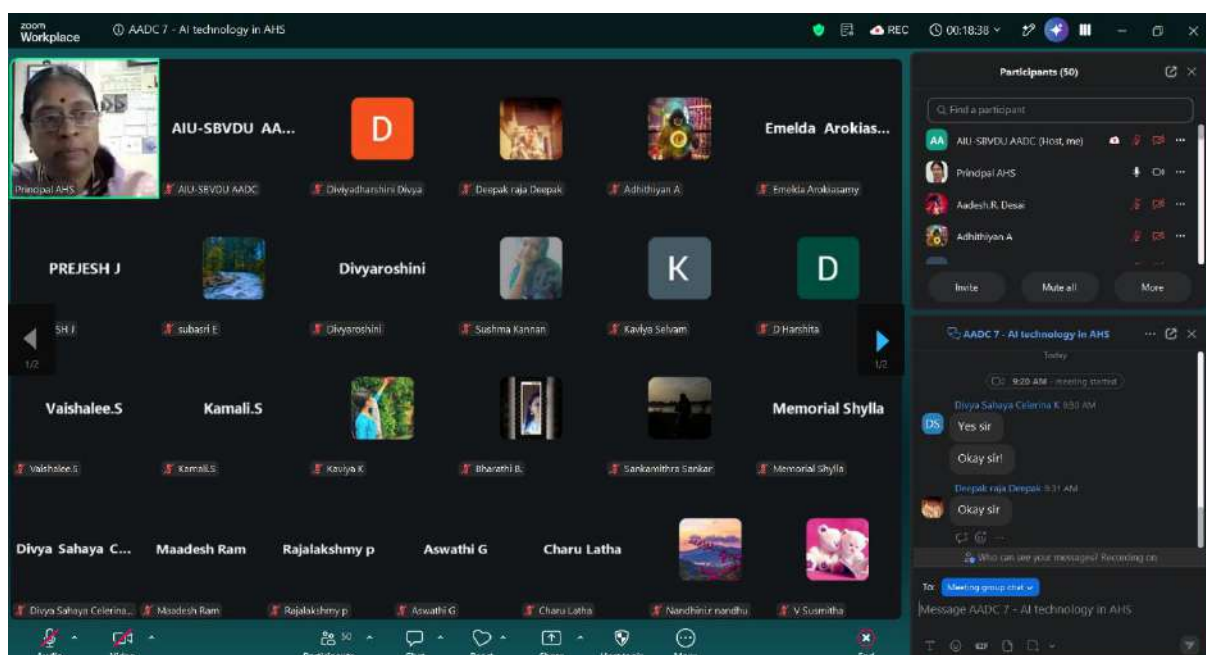
Sourav Das is an Assistant Professor and Medical Microbiologist at the School of Allied & Healthcare Sciences, Sri Balaji Vidyapeeth, Puducherry, with over six years of experience in teaching, research, academic coordination and clinical laboratory practice. He holds an M.Sc. in Medical Microbiology from SRM Institute of Science and Technology and is currently pursuing a Ph.D. in Medical Microbiology at Sri Balaji Vidyapeeth. His expertise includes Medical Microbiology, Parasitology, Mycology, Bacteriology, Immunology, laboratory quality management and infectious disease research. He serves as Academic Coordinator, SAHS IQAC Internal Member, University NSS Coordinator and Animal Welfare Committee Member. He has contributed to the development and copyrighting of SBV's innovative choice-based credit system curricula for B.Sc. Medical Laboratory Technology and Blood Banking Technology. He has authored/co-authored more than 10 publications and is involved in research on bacterial vaginosis, chemotherapy-induced liver toxicity and infectious diseases. He has served as a Resource Person and Guest Speaker in academic programmes and national CMEs and as an External Examiner, Paper Evaluator and Question Paper Setter for Medical Laboratory Technology programmes.

AI Tools in Allied Health Sciences Research - Mr. Sourav Das

Summary

AI Tools in Research Presentation

The session proceeded with Mr. Sourav set to present on AI tools in allied health science research. Saurav began his presentation by explaining that while many AI tools like ChatGPT are widely used, researchers should be cautious about relying solely on general-purpose tools for academic work, as he discovered ChatGPT's references were often fake when verified through DOI numbers.

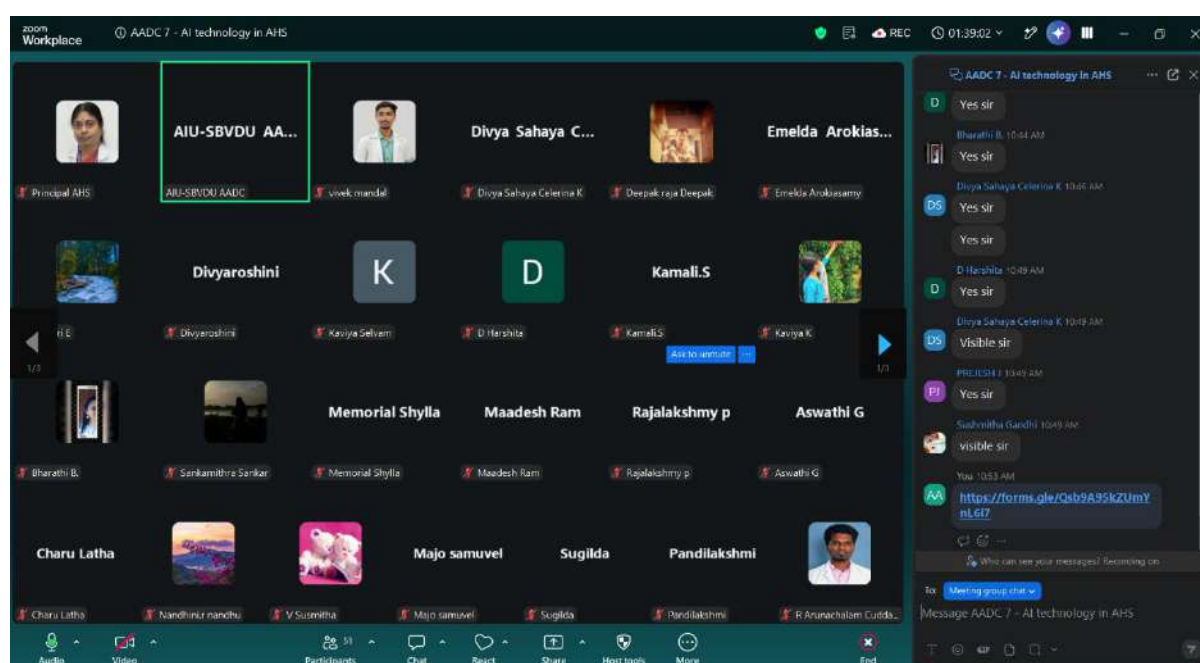


Google Notebook LM Introduction Demo

The meeting focused on introducing and demonstrating Google Notebook LM as an AI tool for educational and professional use. The presenter explained its various features, including the ability to convert text into different formats like slide decks, audio overviews, and mind maps, with support for multiple languages. They emphasized that Google Notebook LM is free to use and seamlessly integrates with other Google platforms. The session included a live demonstration of the tool's capabilities, including how it can generate content from imported sources and create interactive elements like flashcards and infographics.

Sky Space Research Platform Demonstration

The meeting focused on demonstrating a new research platform called Sky Space. AIU-SBVDU explained how the platform can automate literature reviews, generate diagrams, and create manuscripts in various formats including LaTeX. The platform was shown to search both Google Scholar and PubMed automatically, providing summarized results and allowing users to download PDFs of relevant papers. The demonstration included a live search for diabetic retinopathy research from 2020-2025, which returned 100 papers with systematic reviews and diagnostic treatments. AI Tools for Academic Research.



AI Platforms for Visual Content

AIU-SBVDU demonstrated several AI platforms for creating visual content and presentations, including Napkin AI for diagrams and flowcharts, Bio Render and Illustry for scientific illustrations, Power Drill for data presentations, and Whisper Flow for voice-to-text conversion. The session covered how these tools can help with research work and presentations, with particular emphasis on their ease of use and customization options. When asked about potential plagiarism concerns with AI-generated content, AIU-SBVDU clarified that properly generated content based on user instructions should not have plagiarism issues, though he agreed to investigate further with plagiarism detection platforms about how they handle AI-generated images and graphs.

**AI-Enhanced Simulation Training in Allied Health
Sciences: From Skill Acquisition to Intelligent Clinical Decision
Making - Mr. Sagar Patil**



Mr. Sagar A Patil

Academic Coordinator, Assistant Professor,
Apollo Healthcare Academy, Vijaybhoomi University, Karjat, Raigad,
Maharashtra

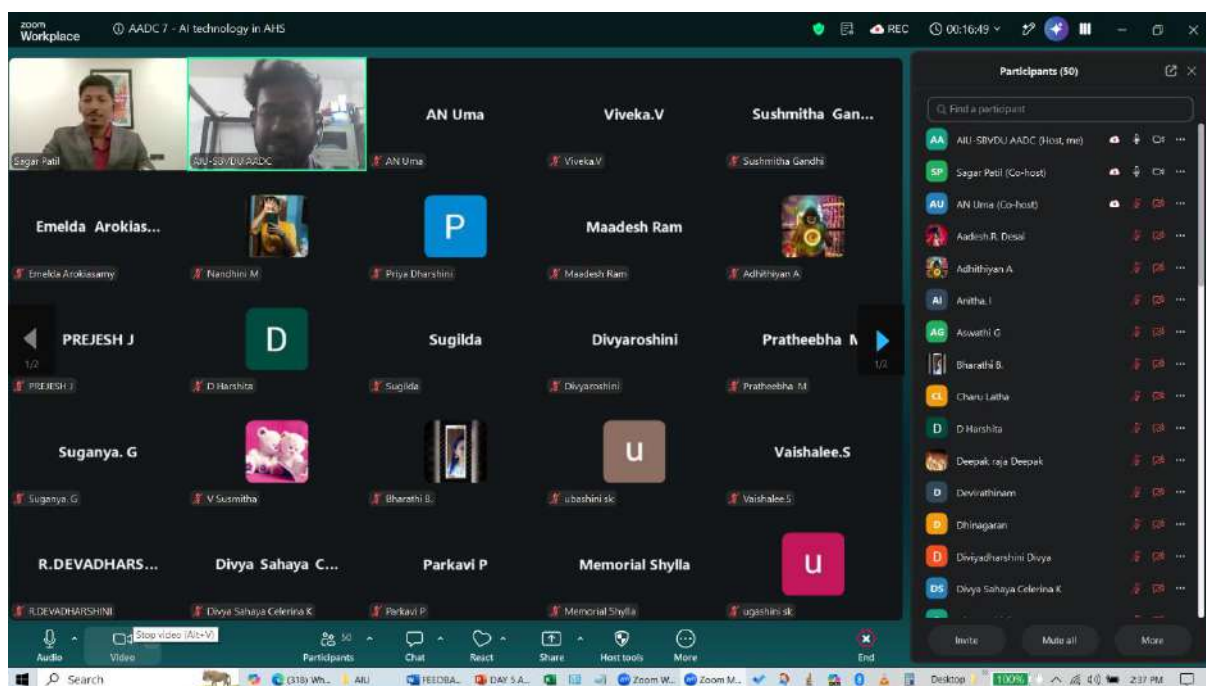
Mr. Sagar Patil is an Academic Coordinator, Full-time Faculty, and ACLS & BLS Instructor at Apollo Healthcare Academy, Vijaybhoomi University. He holds a B.Sc. and M.Sc. in Anaesthesia and Operation Theatre Technology, postgraduate diplomas in Hospital & Healthcare Management and Clinical Research, and is currently pursuing a Ph.D. in Allied Health Sciences. He has extensive experience in teaching pedagogy, outcome-based education (OBE), competency-based education (CBE), curriculum development, and the integration of Artificial Intelligence in healthcare education. His academic and research contributions include 11 patents, 1 copyright, 1 Scopus-indexed book chapter, and 4 research publications. He has actively contributed to faculty development programmes, academic planning, institutional collaborations, and healthcare education, with a strong focus on innovation, research, and excellence in allied health sciences.

AI-Enhanced Simulation Training in Allied Health Sciences: From Skill Acquisition to Intelligent Clinical Decision Making - Mr. Sagar Patil

Summary

AI Healthcare Simulation Workshop

Sagar began his presentation on AI-enhanced simulation for healthcare students at the national workshop organized by Sri Balaji Vidhyapeeth on the theme of AI Technology in Allied Health Sciences. He explained that his aim was not only to present the content but also to engage students through interactive activities, including a survey using Slido. Sagar instructed the participants to access the survey either by scanning a QR code or by entering the specific code on slido.com, requesting their participation through thumbs up or like buttons.



AI Simulation Training Awareness Poll

Sagar introduced and demonstrated the Slido.com platform for student interaction and conducted a poll to assess AI simulation platform training awareness among students. The results showed that 91% of students had not been trained on AI simulation platforms, with only 9% having prior experience. Sagar outlined the session's structure, which would cover theoretical content, AI applications, Indian regulations,

hands-on VR and virtual labs, and free AI simulation platforms, followed by a quiz and feedback session.

AI-Enhanced Medical Simulation Training

Sagar discussed the importance of AI-enhanced simulation in medical education, highlighting three key problems: rising student numbers in allied health sciences, patient safety concerns, and limitations of static training tools. He explained how AI simulation uses machine learning, natural language processing, and predictive algorithms to create adaptive virtual patients that can react realistically and provide performance analytics. Sagar outlined several applications of AI-enhanced simulation including clinical reasoning, procedural skill training, crisis management, and AI-scored assessment, and mentioned current live deployments in India through platforms like AIMS, Maverick simulations, and Body Interact.

Government-Funded Learning Platforms Introduction

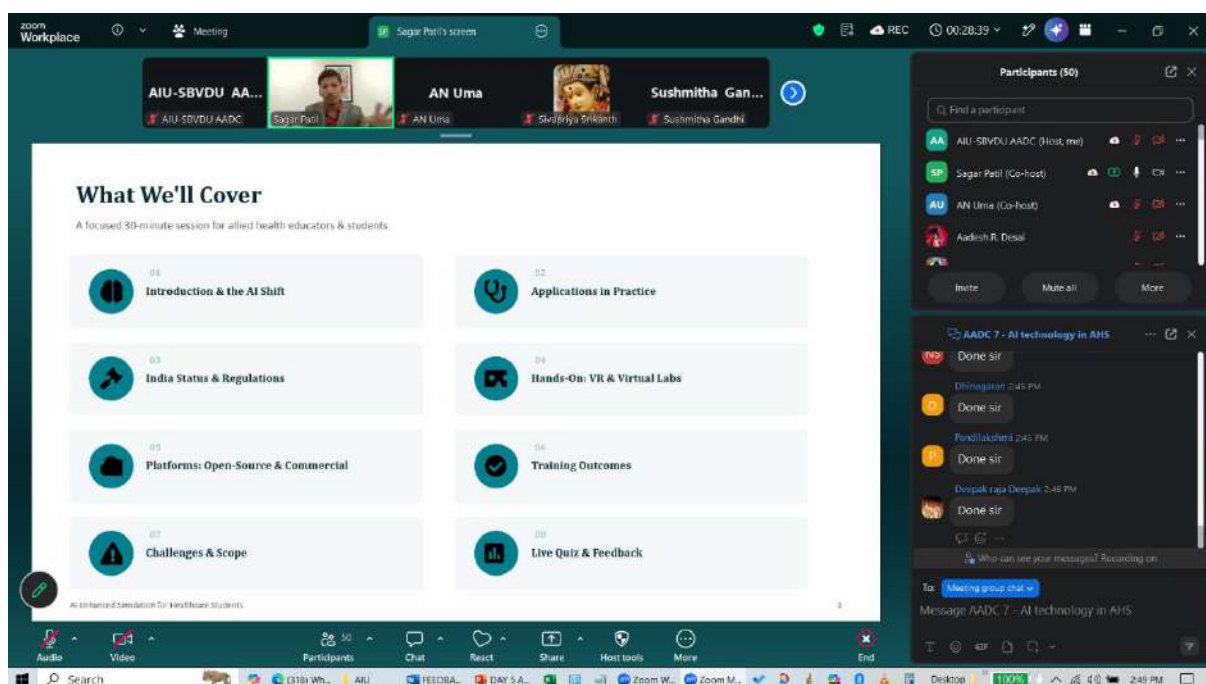
Sagar discussed the importance of competency in education and introduced two free government-funded platforms for students to enhance their learning: OLABs and Virtual Labs. He demonstrated how to use OLABs by showing a chemistry simulation experiment and explained that while Virtual Labs currently doesn't have specific Allied Health Sciences content, it offers relevant courses in biotechnology and bioengineering. Sagar encouraged students to explore these platforms and mentioned that more content related to Allied Health Sciences would be available soon.

Medical Simulation Training Platforms Demo

Sagar demonstrated three educational platforms for medical simulation training. He first showed a blood pressure measurement simulation that includes theory, pre-test questions, procedure guidance, and VR simulation with different monitoring techniques. He then introduced bodyinteract.com, a virtual patient simulator with mannequins that can react to various medical scenarios like cardiac arrest and require appropriate responses like CPR. Sagar encouraged participants to provide feedback on these platforms to help improve them and emphasized the importance of practical simulation training for students.

AI Healthcare Simulation Platform Demo

Sagar demonstrated an AI-enhanced virtual simulation platform that allows healthcare students to practice patient interactions and clinical reasoning in a controlled environment. He explained that while the current platform only supports English, future adaptations are planned to include more languages. Sagar outlined the benefits of using AI simulation platforms, including improved clinical reasoning, higher procedural competency, and freed faculty time, while acknowledging challenges such as high initial investment and faculty training gaps.



AI in Medical Education Best Practices

Sagar discussed data privacy best practices when using AI platforms, advising participants to use secondary or new email IDs instead of primary ones for banking transactions and AI interactions. He explained key applications of AI in medical education, including intelligent learning, adaptive learning, AI diagnostics, and immersive practice through virtual anatomy labs and surgical simulations. The session concluded with Sagar preparing to conduct a quiz, though he waited for more participants to join before starting.

AI Healthcare Simulation Assessment

Sagar conducted an AI-enhanced simulation training assessment with healthcare professionals, asking five multiple-choice questions about AI benefits, technologies, detection capabilities, and training outcomes. The participants demonstrated strong analytical thinking, with high response rates across most questions, particularly achieving 89% and 95% on certain answers. Sagar emphasized that the session was assessment-focused rather than evaluation-focused, encouraging participants to appreciate their participation regardless of individual question responses.

AI Simulation Training Session

Sagar conducted an interactive session on AI-enhanced simulation training for healthcare professionals, with the principal praising his engaging approach and interactive style. The session included a quiz where Dhinakaran scored first place, and Sagar encouraged participants to share their results on LinkedIn. The conversation ended with Sagar requesting feedback through a Slido survey, which showed positive ratings from participants, and he agreed to share relevant platform links and collaborate on future initiatives with the university.

The screenshot displays a Zoom meeting window with a central leaderboard titled "Congratulations, Dhinakaran R!". The leaderboard lists the following participants and their scores:

Rank	Participant	Score	Time
#1	Dhinakaran R.	5/5	1:49
#2	Pandiakshmi	5/5	2:31
#3	vivek mandal	4/5	1:08
#4	Sushma.m	4/5	1:31
#5	Adhithiyan	4/5	1:40

On the left side of the screen, there is a QR code and a Slido link: "Join at slido.com #3713 433". The right sidebar shows a list of participants (49) and a chat window with thumbs up reactions. The bottom of the screen shows the Zoom meeting controls and the Windows taskbar.

Overall Reflections and Conclusion

Overall, the workshop was well received by the participants and provided an informative, insightful, and meaningful learning experience. The practical scenarios and discussions presented during the conference were particularly appreciated for their ability to reinforce existing knowledge and enhance participants' understanding of the subject.

The positive feedback regarding the arrangements and conduct of the sessions reflects the program's effectiveness in creating a conducive academic and learning environment. Participants also expressed interest in having more hands-on workshops and practical sessions in future programs, highlighting the value of experiential learning.

Overall, the conference successfully met its educational objectives, encouraged knowledge sharing, and provided a positive platform for professional learning and interaction. Future editions may further strengthen the program by incorporating additional workshops and interactive practical components to complement the informative sessions.

PROGRAM BROCHURE



**SCHOOL OF ALLIED AND HEALTHCARE SCIENCES
SRI BALAJI VIDYAPEETH**
cordially invite you all to the virtual mode five days national level workshop on

AI TECHNOLOGY IN ALLIED HEALTH SCIENCES **Transforming Healthcare Practice**

Date: 3rd August to 7th August 2026

Time: 09:00 AM to 04:00 PM

Venue: Online Mode

5-day National Workshop

Under the aegis of

AIU-SBV DU AADC



**Association of Indian Universities - Sri Balaji Vidyapeeth Deemed to be University
Academic and Administrative Development Centre**

CHIEF PATRON

Shri. M.K. Rajagopalan
Chancellor, SBV

PATRON

Dr. Balakrishna P. Shetty
Vice Chancellor, SBV

ORGANIZING COMMITTEE

Dr. Shivasakthy M

*Director,
IHPE & Nodal Officer
AIU-SBV DU AADC, SBV*

Dr. A N Uma

*Organizing Chairperson
Principal,
School of Allied and Healthcare
Sciences, SBV*

Mr. Sourav Das

*Organising Secretary
Assistant Prof.
School of Allied and Healthcare Sciences, SBV*

Registration Link: <https://forms.gle/ssRPXfpWXoFBo2vq8>

QR Code



Contact Details: AIU-SBV DU, AADC,
Sri Balaji Vidyapeeth, Puducherry Phone No. 9940724320
Ph: 0413 2616700 Extn- 624
Email: aadc@sbvu.ac.in

For more details: Mail ID: souravdas@migmcri.ac.in Mob: 8902561305

Why the program

Dear Participants,

With great pleasure, the Association of Indian Universities – Sri Balaji Vidyapeeth Deemed to be University Academic and Administrative Development Centre (AIU–SBVDU AADC) warmly invites you to participate in the **National Workshop on “AI Technology in Allied Health Sciences: Transforming Healthcare Practice” (Online Mode)**. This workshop is designed to provide comprehensive insights into the application of Artificial Intelligence technologies in Allied Health Sciences. The sessions will cover key aspects of AI-driven innovations that are transforming healthcare education, clinical practice, and patient care. The program will be guided by well-renowned and experienced resource persons who will share their expertise on emerging AI tools and technologies relevant to allied health disciplines. This workshop offers an excellent opportunity for **faculty members and paramedical professionals** to enhance their knowledge and equip themselves with innovative technological approaches for teaching, learning, and clinical practice in the rapidly evolving healthcare environment.

Workshop Objective

By the end of this 5-day workshop, participants will be able to:

- Introduce participants to the fundamental concepts and applications of Artificial Intelligence in the field of Allied Health Sciences.
- Familiarize allied health professionals with emerging AI-enabled healthcare technologies used in diagnostics, patient monitoring, and clinical decision-making.
- Enhance the capacity of educators and practitioners to integrate AI tools into teaching, research, and clinical practice.
- Encourage the adoption of innovative digital technologies to improve healthcare quality, efficiency, and patient outcomes.

Provide a platform for participants to interact with experts and gain insights into the future role of AI in allied healthcare education and practice.

Workshop Structure

The program follows a structured progression across five days:

1. **Foundations of Artificial Intelligence in Healthcare**
2. **AI-Enabled Clinical Practice**
3. **AI Across Allied Health Disciplines**
4. **AI in Research, Clinical Trials, and Emerging Specialties**
5. **AI for Research, Education, and Simulation**

PROGRAM SCHEDULE

03.08.2026 - DAY -1 - 09:00 AM - Inauguration & Icebreaking		
	09:00 AM – 01:00 PM	02:00 PM – 04:00 PM
DAY 1 03.08.2026	Impact of AI in Allied Health Sciences <i>Dr. A N Uma</i>	AI The New Era in Diagnostic Technology <i>Dr. Kanishka Hrishi Das</i>
DAY 2 04.08.2026	Future of Physician Associates in the AI-Enabled Healthcare System <i>Mr. Jit Adhikary</i>	Ethical and Legal Challenges of AI in Healthcare <i>Dr. Anandaraj. R.</i>
DAY 3 05.08.2026	AI in Cardiovascular Perfusion: Enhancing Safety and Precision in Cardiac Surgery” <i>Mrs. Sowmya D</i>	Public Health & Outreach Technologies in the era of AI <i>Dr. B. Lavanya</i>
DAY 4 06.08.2026	AI In Clinical Trial Design <i>Dr. Vimala Ananthya A</i>	Recent Advances in Ophthalmology <i>Dr. K. Jayalatha</i>
DAY 5 07.08.2026	AI Tools in Allied Health Sciences Research <i>Mr. Sourav Das</i>	“AI-Enhanced Simulation Training in Allied Health Sciences: From Skill Acquisition to Intelligent Clinical Decision-Making” <i>Mr. Sagar Patil</i>

REGISTRATION DETAILS

Registration Fees	<i>INR 1180/-</i>
Mode of Delivery	<i>Online mode</i>
Last date of Registration	<i>31.07.2026</i>
Registration link	https://forms.gle/ssRPXfpWXoFBo2vq8

PAYMENT DETAILS

ACCOUNT NAME: SBVCON	Bank Name: Indian bank
Account Number: 6034458221	IFSC: IDIB000P042
Branch: Pondicherry Main Branch	PAN: AAJTS939L

The workshop is designed for:

- Faculty members
- Postgraduate students
- Clinicians
- Researchers
- Medicine
- Public Health
- Dentistry
- Physiotherapy
- Nursing
- Allied Health Sciences

RESOURCE PERSONS DETAILS

1. Dr. A.N. Uma

Prof. of Medical Genetics,
Principal, School of Allied and Healthcare Sciences
Sri Balaji Vidyapeeth, Puducherry

2. Dr. Kanishka Hrishi Das

Assistant Professor (Med. Micro) Dept. of Allied Health Sciences
Chitkara School of Health Sciences, Chitkara University, Punjab

3. Mr. Jit Adhikary

Consultant & Faculty – Critical Care,
Joint Head of Allied health sciences &
HOD – Physician Associate Program, Instructor of AHA & IRLC- ACLS & BLS Training
Program
Amrita Hospital Faridabad & Amrita Vishwa Vidyapeetham.

4. Dr. Anandaraj. R.

Assistant Professor, Community Medicine
Indira Gandhi Medical College & Research Institute, Puducherry.

5. Mrs. Sowmya D

Assistant Professor
Assistant Controller of COE
School of Allied & Healthcare Sciences, Sri Balaji Vidyapeeth, Puducherry

6. Dr. B. Lavanya

MD. DNB
Assistant Professor, Dept. of Community Medicine
Aarupadai Veedu Medical College & Hospital, Puducherry

7. Dr. Vimala Ananthi A

Professor
Department of Pharmacology
Mahatma Gandhi Medical College and Research Institute, Sri Balaji Vidyapeeth, Puducherry

8. Dr. K. Jayalatha

MBBS, DO, DNB
Phaco & Glaucoma Surgeon & Medical Retina Specialist.
Puducherry

9. Mr. Sourav Das

Assistant Professor (Med. Micro)
School of Allied & Healthcare Sciences, Sri Balaji Vidyapeeth, Puducherry

10. Mr. Sagar A Patil

Academic Coordinator, Assistant Professor,
Apollo Healthcare Academy, Vijaybhoomi University, Karjat, Raigad,
Maharashtra

DELEGATES DETAILS

Sl. No.	Name	Designation	Institution
1.	Nandhini. M	Tutor	School of Allied and Healthcare Sciences
2.	Dr. P. Rajalakshmy	Associate Professor	School of allied and healthcare sciences, Sri Balaji Vidyapeeth
3.	Vaheetha begum. S	Tutor	SAHS-SBV
4.	Aadesh r desai	Assistant Professor	Sri Balaji Vidyapeeth University, Puducherry
5.	Dharshini M	Tutor	School of allied and health care sciences, Sri Balaji Vidyapeeth deemed to be university
6.	Ms.sankamithra s	Tutor	School of Allied and healthcare Sciences
7.	Dhinakaran R	Lecturer	School of allied and healthcare sciences
8.	Sugilda avril	Lecturer	SAHS
9.	Jaisri S	Tutor	School of allied and healthcare sciences
10.	Ms. KAVIYA N	Tutor	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
11.	Parkavi P	Tutor	School of allied and healthcare sciences, SBV
12.	Siva priya s	Assistant Professor	SAHS, MGMCRI
13.	Nandhini.R	Tutor	School of allied and healthcare sciences , Pondy
14.	Ms. Anitha. I	Tutor	School of Allied and Healthcare Sciences, SBV (Pondicherry Campus)
15.	Karthik A	Tutor	SBV/ Pondicherry
16.	Kheerthana. N	Assistant professor	School of allied and healthcare sciences
17.	Ms. SANA H	Tutor	School of Allied and Healthcare Sciences, SBV, Pondy campus
18.	Ms. AKILA M	Tutor in Respiratory therapy	Sri Balaji Vidyapeeth
19.	Mrs. SUBASRI E	Tutor in Anaesthesia technology	Sri Balaji Vidyapeeth
20.	Tamilarasi K	Assistant Professor	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth (Deemed to be University)
21.	V. Vijayaraghavan	Tutor	SAHS
22.	Mr. B.v. abhishek	Tutor in urology technology	Sri Balaji Vidyapeeth
23.	Dr. S. Vimalavalli	Assistant professor	School of Allied and Healthcare Sciences
24.	Vaishalee S	Tutor	SAHS
25.	Sathiyapriya.a	Tutor	SBV
26.	Prejesh j	MSc	School of allied and healthcare science, SBV, Puducherry
27.	Deepakraja s	Msc	School of allied and health care sciences, Puducherry

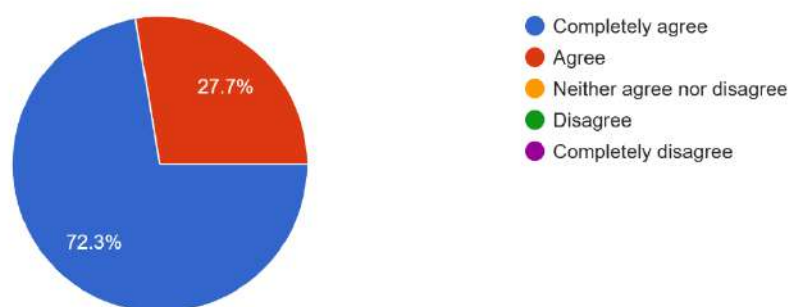
28.	Bakkiyalakshmi S	Tutor	SAHS, SBV PUDUCHERRY
29.	Arunachalam r	Postgraduate Student	SAHS, MGMCRI, PONDY
30.	Sushmitha	STUDENT	School of Allied & Health Care Sciences
31.	Kamali.S	M.Sc Renal Dialysis technology	SAHS, SBV
32.	Devadharshini.R	Msc.student	Sri Balaji Vidyapeeth
33.	Emelda A	Student	Sri Balaji Vidyapeeth
34.	Devirathinam.R	Msc.Clinical Nutrition (student)	Allied Healthcare Sciences, Sri Balaji Vidyapeeth
35.	Vivek mandal n	Student	SAHS - SBV
36.	R divyaroshini	Student	SAHS, SBV
37.	Divya sahaya celerina k	STUDENT	SAHS, SBV
38.	M. Sushma	MSc. pathology	SAHS - SBV
39.	Varsha	MSc. Clinical Nutrition (student)	Allied Healthcare Sciences, Sri Balaji Vidyapeeth
40.	Y. Maadesh ram	Student	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
41.	Memorial shylla	M. Sc	Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
42.	S.k ugashini	For attend conference	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
43.	P. Charulatha	To attend conference	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
44.	Majo samuvel david	Student	Sri Balaji Vidyapeeth University, Pondicherry
45.	S.k ubashini	For conference	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
46.	Aswathi G	MSc	MGMCRI - SAHS
47.	D harshita	MSc Anaesthesia technology	School of allied health sciences, Sri Balaji Vidyapeeth
48.	Bezawada Bharathi devi	M. Sc	School of allied health science Sri Balaji Vidyapeeth
49.	Sindhuja k	STUDENT	SAHS, SBV
50.	Pratheebha m	POSTGRADUATE STUDENT	SCHOOL OF ALLIED AND HEALTHCARE SCIENCES, SBV
51.	Nandini s	POSTGRADUATE STUDENT	SCHOOL OF ALLIED AND HEALTHCARE SCIENCES, SBV
52.	Adhithiayan a	POSTGRADUATE STUDENT	SCHOOL OF ALLIED AND HEALTHCARE SCIENCES, SBV
53.	Viruthika	Msc MLT in Pathology	Sri Balaji Vidyapeeth - School of Allied health science
54.	Pandilakshmi.V	Student	SAHS, SBV
55.	Priyadharshini S	Student	Sri Balaji Vidyapeeth
56.	Suganya	Physician associate	Sri Balaji Vidyapeeth Pondicherry

57.	Diviyadharshini b	MSc mlt pathology	SBV- SAHS
58.	J Frieda	Post graduate	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
59.	Kaviya selvam p	Msc medical imaging technology	Mahatma Gandhi medical College
60.	Susmitha. v	Physician associate	SBV
61.	Viveka. V	MSC (student)	School of Allied and Healthcare Sciences, Sri Balaji Vidyapeeth
62.	Swathy P	Student	MGMCRI SBV CAMPUS PUDUCHERRY
63.	Rohini b	M.Sc.	Sri Balaji Vidyapeeth
64.	Kaviya k	MSc	Sri Balaji Vidyapeeth
65.	Geerthivashini	Student	Sri Balaji Vidyapeeth

PROGRAM FEEDBACK AI for AHS 03.08.26 to 07.08.26

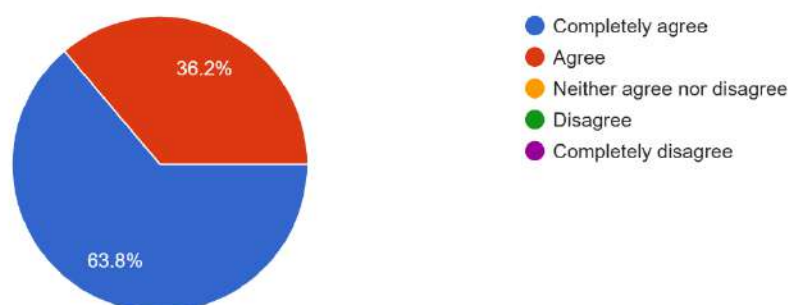
The topics presented were relevant to the objectives of the entire training

47 responses

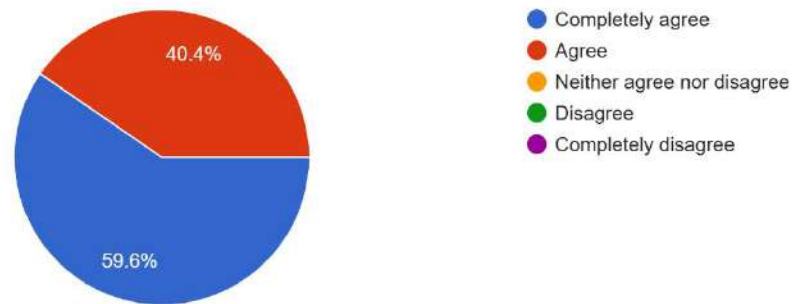


The content presented by the resource persons on all the days were useful

47 responses

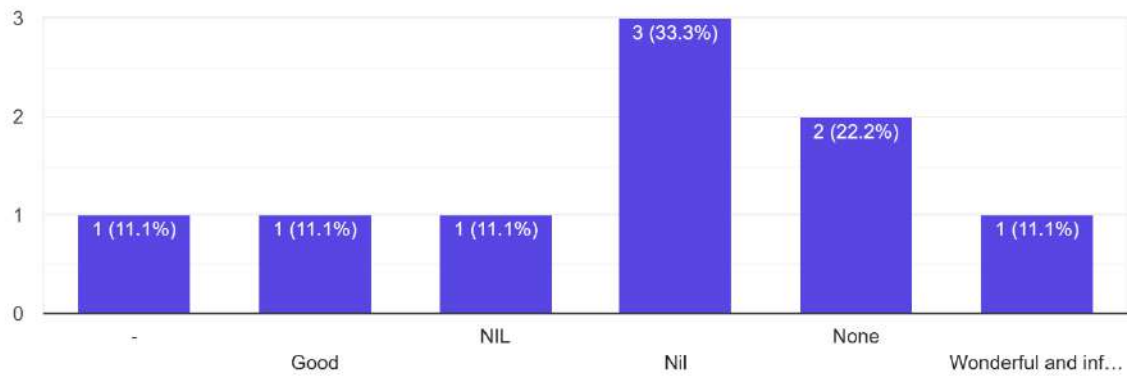


The learning climate during the training was characterized by openness and seriousness of purpose
47 responses



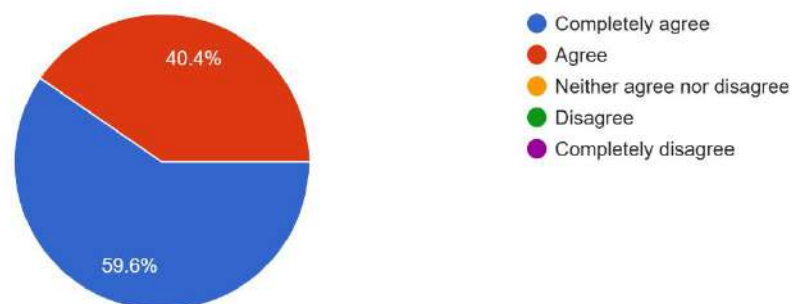
If no, please give reason.

9 responses



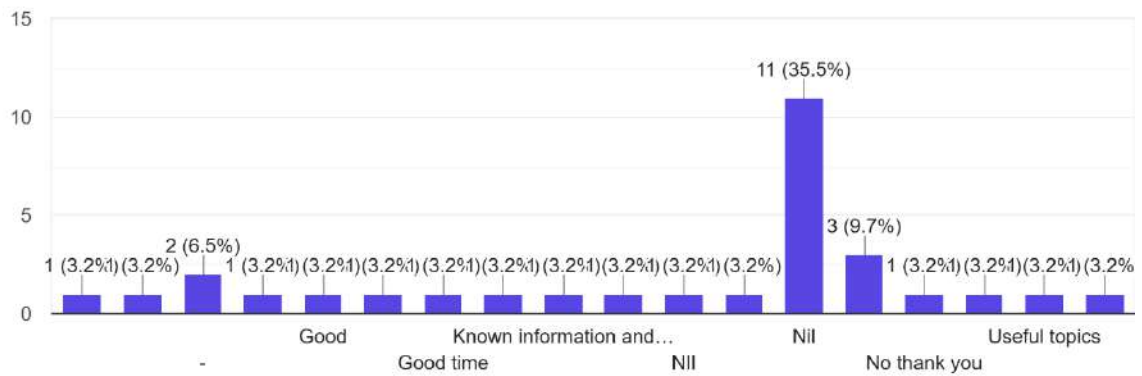
The event provided adequate opportunities to encourage active participation

47 responses



Any other comments

31 responses



Dr. Shivasakthy Manivasakan
Nodal Officer
AIU-SBVDU AADC
Sri Balaji Vidyapeeth
Puducherry