Editorial Note

Advancing Multidisciplinary Excellence in Respiratory Medicine: Lessons from Research, Innovation, and Complex Case Experiences at Persahabatan National Respiratory Center Hospital

***Agus Dwi Susanto*[1]**

[1]Board of Directors, Persahabatan Hospital, Jakarta

Abstract

Background: Persahabatan National Respiratory Center Hospital has undergone significant advancements in multidisciplinary clinical services, research capacity, and innovative respiratory care programs. This editorial synthesizes key institutional achievements and scientific contributions featured in the current issue of the *Persahabatan Respiratory Journal*.

Content: The establishment of the Clinical Research Unit (CRU) marks a foundational step toward strengthening research governance, improving protocol quality, and enabling multicenter collaboration across pulmonology, rehabilitation, microbiology, radiology, thoracic surgery, and public health. Advances in genomic and stem cell research for tuberculosis (TB) and chronic pulmonary diseases demonstrate the hospital's commitment to translational precision medicine, focusing on host susceptibility profiling and immunomodulatory therapies relevant to Indonesia's high TB burden.

Persahabatan Hospital's pioneering role in building Indonesia's first lung transplant program highlights the importance of multidisciplinary integration involving thoracic surgery, anesthesiology, intensive care, infectious disease management, and post-transplant rehabilitation. The rare case series on genital tuberculosis underscores diagnostic challenges and the need for cross-specialty awareness between pulmonology, gynecology, and pathology. Additionally, the forensic analysis of a dead-on-arrival patient shortly after discharge illustrates the value of integrating clinical and forensic perspectives to enhance safety and quality assurance. The report on late-onset fluorouracil extravasation in nasopharyngeal carcinoma further emphasizes coordinated oncologic, dermatologic, and nursing responses to chemotherapy complications.

Conclusion: Collectively, these contributions reflect Persahabatan Hospital's evolving strength as a multidisciplinary, research-driven national respiratory center and underscore its expanding role in advancing clinical excellence and scientific innovation in Indonesia.

Keywords: Multidisciplinary, Research, Innovation, Complex case

Corresponding Author:
Agus Dwi Susanto
Board of Directors, Persahabatan, Jakarta, Indonesia
agus_ds2000@yahoo.com

Submitted: November 1st 2025
Accepted: November 7th 2025
Published: December 2nd 2025

Cite this:
Susanto AD. Advancing multi-disciplinary excellence in respiratory medicine: lessons from research, innovation, and complex case experiences at Persahabatan National Respiratory Center Hospital. Persahabatan Respirology Journal 2025;1(1)

Persahabatan Respirology Journal
Vol. 1 No. 1
e-ISSN: 3124-0518
DOI:
Open access under Creative Commons Attribution-ShareAlike 4.0 International License (CC-BY-SA), According to https://creativecommons.org/licenses/by-sa/4.0/deed.en

As Indonesia's National Respiratory Center, Persahabatan Hospital leads the way in advancing integrated, multidisciplinary care for patients with complex lung diseases. The articles in this edition of the Persahabatan Respiratory Journal highlight the institution's increasing strengths in research, clinical innovation, translational science, and collaborative problem-solving. Together, these contributions emphasize not only technical achievements but also the importance of multidisciplinary coordination that supports Persahabatan Hospital's long-term goal of becoming a leading center for patient-centered, research-driven respiratory care in the Asia-Pacific region.[1]

Building a Foundation for Rigorous Clinical Research

A key milestone in the hospital's transformation is the development of the Clinical Research Unit (CRU). More than just a structural investment, the CRU represents a shift toward systematic, ethically grounded, and internationally aligned research practices. Its creation allows clinicians and researchers across pulmonology, rehabilitation, microbiology, thoracic surgery, radiology, pharmacology, and public health to collaborate under a unified governance framework. This multidisciplinary approach enhances protocol development, speeds up patient recruitment, improves data quality, and opens opportunities for large-scale, multi-center collaborations. The CRU is set to become a catalyst for capacity building—empowering Persahabatan Hospital to contribute not only clinical services but also high-impact scientific evidence that influences respiratory medicine in Indonesia and beyond.[2]

Genomic and Stem Cell Research: Pioneering Precision Medicine for Tuberculosis and Pulmonary Diseases

The integration of genomics and stem cell science into tuberculosis (TB) and respiratory research represents one of the hospital's most innovative advancements. The experience shared in this issue demonstrates how genomic profiling improves diagnostic accuracy, identifies host susceptibility patterns, and guides personalized treatment strategies—crucial advancements in a country with one of the highest TB burdens globally. At the same time, experimental work involving mesenchymal stem cells and immunomodulatory pathways broadens the options for managing post-TB lung impairment, chronic airway inflammation, and fibrosis. These initiatives require close collaboration among pulmonologists, molecular biologists, laboratory medicine experts, infectious disease specialists, and rehabilitation teams, reflecting Persahabatan's dedication to translational, multidisciplinary respiratory science.1,3

Establishing Indonesia's First Lung Transplant Program

Another key achievement is Persahabatan Hospital's leadership in launching Indonesia's first lung transplant program. This significant effort required extraordinary collaboration among thoracic surgery, anesthesiology, intensive care, infectious disease, immunology, radiology, respiratory rehabilitation, ethics committees, and hospital administration. The program's initial milestones—patient selection processes, perioperative management systems, donor evaluation workflows, and post-transplant rehabilitation protocols—show how multidisciplinary teamwork directly leads to better survival rates and improved quality of life. Persahabatan Hospital's pioneering work sets a national standard and highlights the vital importance of team-based expertise in managing highly complex respiratory care.1,4

Expanding Diagnostic Vigilance: Rare Cases of Genital Tuberculosis

The two-case report on genital tuberculosis, a rare and often underdiagnosed condition, emphasizes the importance of clinical vigilance and collaboration across different departments. These cases highlight the diagnostic challenges encountered in extrapulmonary TB, where symptoms can be vague and necessitate collaboration among pulmonologists, gynecologists, microbiologists,

radiologists, and pathologists. The report highlights the need for enhanced screening methods and increased awareness among clinicians managing reproductive, infectious, and respiratory health, particularly in high-burden countries such as Indonesia. 1

Forensic Perspectives in Clinical Practice

The forensic analysis of a dead-on-arrival case shortly after discharge illustrates the value of multidisciplinary review in ensuring patient safety, clinical accountability, and ethical transparency. The collaboration between pulmonologists, emergency physicians, medical forensic experts, and hospital quality assurance teams demonstrates how such cases must be examined to differentiate between natural progression and avoidable clinical factors. This integration of clinical and forensic perspectives strengthens hospital governance and informs continuous improvement strategies.[1,5]

Chemotherapy Complications: Late-Onset Fluorouracil Extravasation

The report on late-onset fluorouracil extravasation in a patient with nasopharyngeal carcinoma emphasizes the importance of coordinated oncologic, dermatologic, nursing, and emergency care. Chemotherapy complications require prompt recognition, structured protocols, and multidisciplinary decision-making to prevent severe tissue injury and ensure optimal functional outcomes.[1]

CONCLUSION

The variety of works featured in this issue demonstrates how Persahabatan Hospital is transforming into a comprehensive, multidisciplinary respiratory center rooted in innovation, collaboration, and evidence-based practice. By strengthening our emphasis on integrated care, advanced research, and shared clinical learning, we continue to elevate the standards of respiratory medicine for Indonesia and contribute meaningfully to global scientific progress.[1]

REFFERENCE

1. Epstein N. Multidisciplinary in-hospital teams improve patient outcomes: A review. Surg Neurol Int. 2014;5(8):295.
2. Kementerian Kesehatan Republik Indonesia. Keputusan Menteri Kesehatan Republik Indonesia, KEPMENKESRI Nomor HK.01.07/ Menkes/1458/2023 tentang Pembentukan dan Tata Kelola Clinical Research Unit di Rumah Sakit. Jakarta; 2023
3. Gardy JL, Loman NJ. Towards a genomics-informed, real-time, global pathogen surveillance system. Nature Reviews Genetics. 2018 Jan;19(1):9-20.
4. RSUP Persahabatan. Alur MBO dan Informed Consent Donor Paru: Tim Skrining dan Advokasi Donor RSUP Persahabatan. Jakarta; 2024.
5. Praveen K, Nallasamy K, Jayashree M, Kumar P. Brought in dead cases to a tertiary referral paediatric emergency department in India: a prospective qualitative study. BMJ Paediatr Open. 2020;4(1):e000606.