



UNIVERSITI
KEBANGSAAN
MALAYSIA
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of Malaysia*



19th

Postgraduate Forum on Health System & Policy **2025**

Programme Book

Conference Background

The Postgraduate Forum (PGF) on Health System and Policy is a regional academic initiative that began in 2007 to support postgraduate education, research exchange, and collaboration in the field of health systems and policy. Since its establishment, PGF has provided a platform for students, academics, and practitioners to share ideas and address key health challenges across the region.

Now in its 19th edition, PGF returns to Yogyakarta for the sixth time. Over the years, the forum has been jointly organized by Universitas Gadjah Mada, Universiti Kebangsaan Malaysia, and initially Naresuan University, before being continued by Prince of Songkla University as a long-term partner. The event rotates annually among these institutions, building sustained collaboration and knowledge-sharing in Southeast Asia.

The theme of this year's forum, **"Policy and Action for Sustainable Healthcare 2030,"** invites critical reflection on how health systems can respond to evolving challenges, including climate

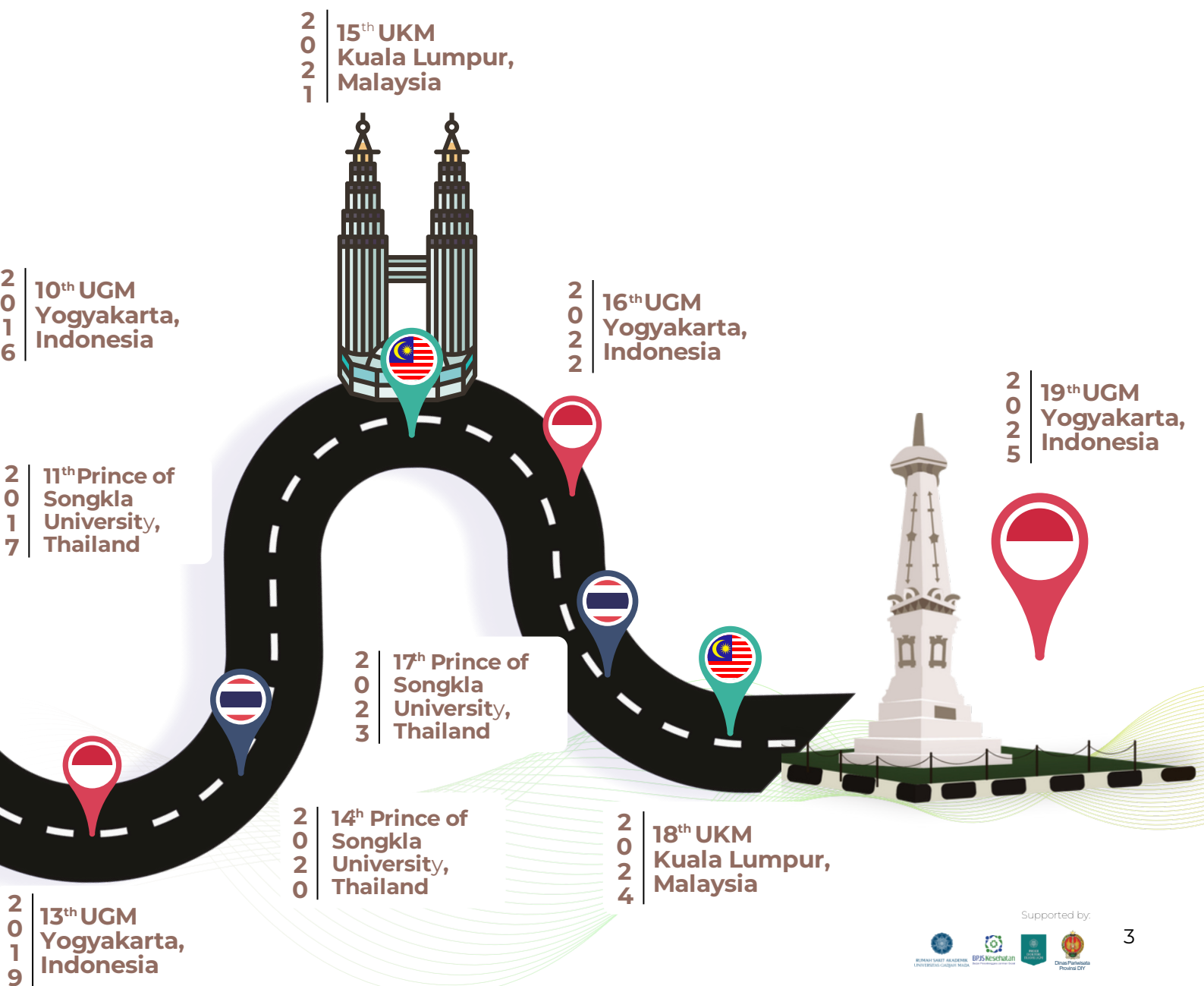


19th PGF 2025 themed “Policy and Action for Sustainable Healthcare 2030” invites critical reflection on how health systems can respond to evolving challenges”.

change, financial pressures, technological advancement, and the need for inclusive service delivery. Held over two days, the forum features plenary sessions, oral and poster presentations, and interactive discussions across a broad range of topics.

This year, PGF also welcomes contributors and speakers from a wider group of universities, national ministries, and policy institutions, marking a step forward in expanding collaboration beyond the original organizing partners. We hope this growing participation reflects the forum's relevance and its potential as an open platform for regional dialogue and learning.

This forum is as much about connection as it is about content. We hope you will engage openly, think creatively, and take inspiration from one another. What begins here may inspire partnerships and innovations long after the forum ends.



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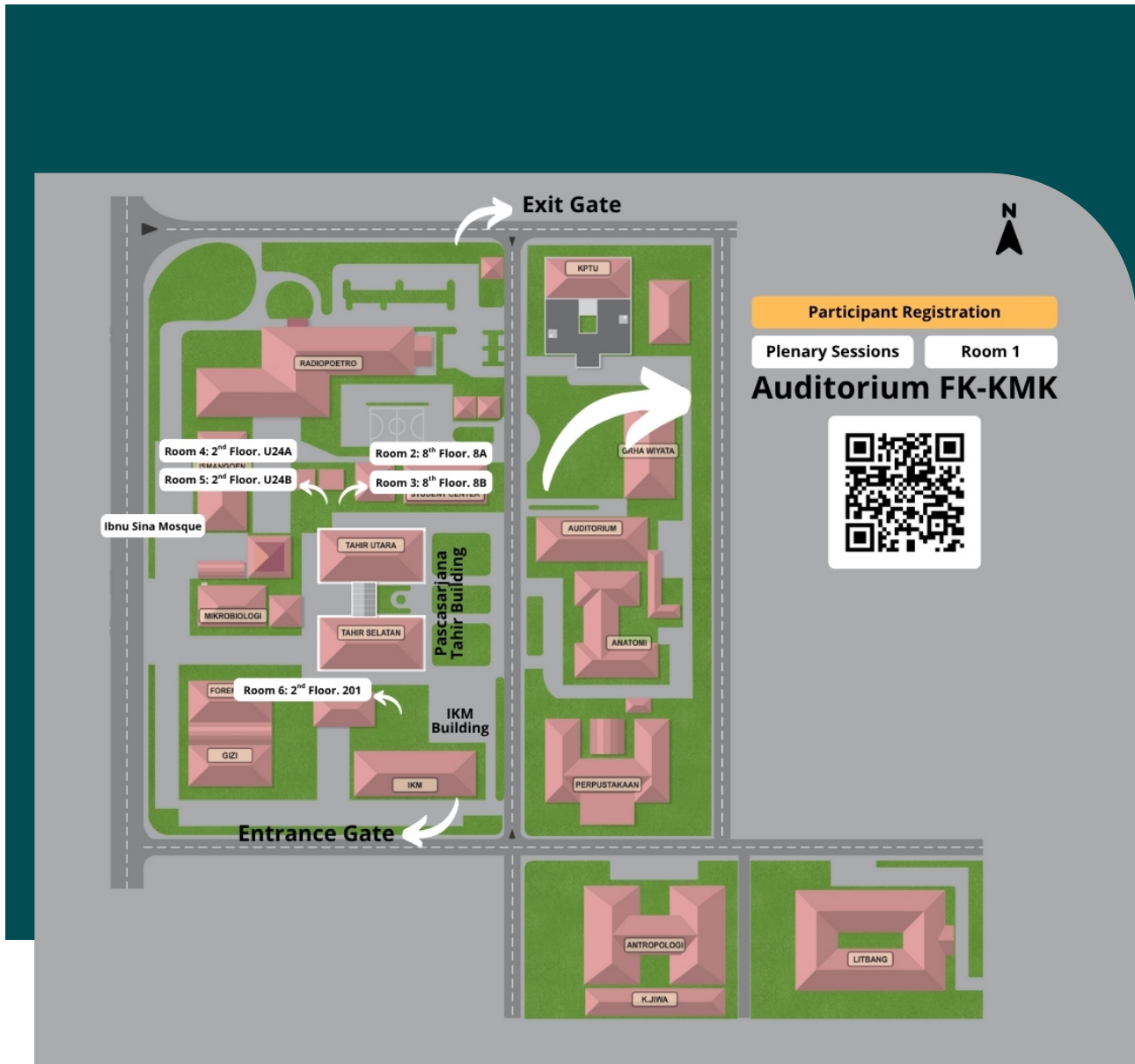


BPJS Kesehatan
Badan Penyelenggara Jaminan Sosial



Dinas Pariwisata
Provinsi DIY

VENUE MAP



ORGANIZING COMMITTEE

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Prof.dr.Yodi Mahendradhata, M.Sc., PhD., FRSPH
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Prof. dr. Adi Utarini., M.Sc., MPH., PhD.
Dr. dr. Mubasysyir Hasanbasri, MA
Dr. dr. Andreasta Meliala, M.Kes

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Shita Listya Dewi, MM., MPP

Dinner and Gathering Event

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Sokhidin
Nur Wahid

The background of the slide is a faded, artistic illustration of a park. In the foreground, there are green trees and foliage. In the middle ground, a large, multi-story building with a central tower and arched windows is visible. The sky is light blue with soft, white clouds. The overall tone is bright and welcoming.

WELCOME MESSAGES

Welcome Message from The Dean of Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada



Dear Esteemed Colleagues and Delegates,

It is a great pleasure to welcome you to Yogyakarta and the 19th Postgraduate Forum on Health System and Policy, hosted by the Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada (FK-KMK UGM). At FK-KMK UGM, we are deeply committed to contributing to health system strengthening through academic excellence, policy-relevant research, and meaningful community partnerships. We believe that sustainable health systems can only be achieved when science, policy, and local action are aligned with shared values and mutual respect.

This forum is instrumental to our above mentioned commitment by providing an important space for thoughtful exchange and collaborations as we collectively respond to the evolving challenges facing health systems around the world. The themes addressed in this year's forum reflect our collective responsibility to promote health equity, accelerate innovation, and build system resilience in the face of global uncertainty. From digital health and climate change to health financing and universal coverage, this gathering presents an opportunity to learn, to question, and to build new relationships that may shape future action.

I would like to express my sincere appreciation to all speakers, participants, and organizers for their dedication to this forum. I hope your time in Yogyakarta will be both enriching and inspiring, and that the conversations here will leave a lasting impact beyond the event itself.

Warm regards,
Prof. Dr. Yodi Mahendradhata, Ph.D.

Welcome Message from Chair, Organizing Committee 19th Postgraduate Forum on Health System & Policy



Dear Distinguished Delegates,

On behalf of the Organizing Committee of the 19th Postgraduate Forum on Health System and Policy at the Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, it is our great pleasure and honor to welcome all of you to Yogyakarta. We are thrilled to gather hundreds of exceptional submissions from over ten countries, reflecting the truly global and interdisciplinary spirit of our forum.

Over the next two days (17–18 June 2025), you will engage in a rich scientific program featuring international plenaries, oral and poster sessions, and interactive workshops focused on sustainable financing, digital health, green hospitals, and universal health coverage. This event is more than an academic gathering—it's a space to forge partnerships, transfer knowledge, and strengthen health systems for the future.

We extend special gratitude to our speakers, reviewers, sponsors, and support staff—your dedication has been essential in shaping the high quality of the program. For our presenters, thank you for trusting us with your research; we are eager to learn from your findings. For delegates, your participation energizes our shared mission to translate evidence and innovation into sustainable health policies.

Beyond the sessions, we invite you to experience Yogyakarta's vibrant culture and heritage. Don't miss the pre- and post-conference activities, including Prambanan Temple, local cuisine, and a city tour on 19 June—an opportunity to connect informally and enjoy the rich traditions of our region.

We hope the discussions and relationships you build here will catalyze meaningful impact in your home countries and beyond. Thank you for joining us—may the 19th PGF be inspiring, enlightening, and transformative.

**Warm regards,
Lutfan Lazuardi**



CONFERENCE PROGRAMME



DAY 1 Tuesday, 17 June 2025

07.30 – 08.00	30'	Registration	
Opening Session			
08.00 – 08.05	5'	Opening Day 1	MC
08.05 – 08.15	10'	Opening Remark	Prof. dr. Yodi Mahendradhata, M.Sc, Ph.D, FRSPH Dean Faculty of Medicine, Public Health and Nursing, UGM*
08.15 – 08.25	10'	Opening Ceremony	Art and cultural performance*
08.25 – 08.45	20'	Keynote speech: Ministry of Health Policies for Advancing Climate Resilience and Sustainable Healthcare in Indonesia*	Prof. dr. Dante Saksono Harbuwono, Sp.PD-KEMD, Ph.D. Deputy Minister of Health
08.45 – 08.50	5'	Official Photo Session and Transition Break	MC
Plenary Session I: Innovations and Solutions for Sustainable Health Systems Moderator: Andreasta Meliala, Dr. dr. DPH., MKes, MAS			
08.50 – 08.55	5'	Introduction to the plenary session I by Moderator	Moderator
08.55 – 09.15	20'	The Ministry of Health's Strategy for Advancing Environmentally Friendly Healthcare Services	dr. Then Suyanti, MM Director of Environmental Health, MoH (online)
09.15 – 09.30	15'	Health Financing for Universal Health Coverage: Current and Future Challenges	Prof. Dato' Dr. Syed Mohamed Aljunid Professor of Health Economics and Policy UKM & IMU, Malaysia
09.30 – 09.45	15'	Aligning UHC with Preventive and Primary Care in Indonesia's National Health Insurance	Prof. dr. Ali Ghufroon Mukti, M.Sc., Ph.D., AAK President Director of BPJS Kesehatan (Indonesia's National Health Insurance Agency)
09.45 – 10.00	15'	Strategic Health Financing for System Sustainability in an Era of Global Realignment	Prastuti Soewondo, S.E., M.P.H., Ph.D. Special Advisor on Health Financing to the Indonesian Minister of Health.
10.00 – 10.15	15'	Pathways to Green Hospitals in Indonesia	Dr. dr. Darwito, S.H., Sp.B.Subsp.onk. (K) President Director, Academic Hospital of Universitas Gadjah Mada (RSA UGM)

10.15 – 10.30	15'	Discussion (Q&A session)	Moderator
10.30 – 10.35	5'	Summary and closing plenary session by moderator	Moderator
10.35 – 10.40	5'	Transition	MC
10.40 – 11.00	20'	Coffee break	Lobby auditorium
11.00 – 12.30	90'	Oral Presentations	Parallel between oral sessions across themes
12.30 – 13.30	60'	Lunch	Lobby auditorium
13.30 – 15.00	90'	Oral Presentations	Continuation of parallel sessions across themes
14.55 – 15.10	15'	Coffee break	
Plenary Session II: Strengthening Community and Preventive Health Approaches Moderator: dr. Likke Prawidya Putri, MPH., PhD			
15.10 – 15.15	5'	Introduction to the plenary session II by Moderator	Moderator
15.15 – 15.30	15'	Can AI Help Us Decide? Are More Expensive Medicines Worth It?	Dr. Maarten Kok Assistant Professor Erasmus University Rotterdam & VU Amsterdam
15.30 – 15.45	15'	Challenges and Priorities of Public Health in 21st Century: Can we achieve SDGs?	Prof. Quazi Monirul Islam Prince of Songkla University; Former WHO Director
15.45 – 16.00	15'	Resilience in Health Systems: Why Sustainable Financing Must Include Dental Care	Prof. Dr. Tuti Ningsih Mohd Dom Dean Faculty of Dentistry Universiti Kebangsaan Malaysia
16.00 – 16.15	15'	Communication Strategies and Community Engagement for Sustainable Healthcare	Prof. Tippawan Liabsuetrakul Director WHO Collaborating Centre; Prince of Songkla University
16.15 – 16.30	15'	UHC for the Aging Population: Optimizing Preventive Care for Older Patients at Primary Care	Assoc. Prof. Dr. Mohd Fairuz Ali Department of Family Medicine, Faculty of Medicine Universiti Kebangsaan Malaysia
16.30 – 16.45	15'	Discussion (Q&A session)	Moderator
16.45 – 16.50	5'	Summary and closing plenary session	Moderator
16.50 – 17.00	10'	Closing of day 1	MC

DAY 2

Wednesday, 18 June 2025

07.30 – 08.00	30'	Registration	Lobby Auditorium (+bring the snacks)
08.00 – 08.10	10'	Opening day 2	MC
08.10 – 09.25	75'	Oral Presentations	Parallel between oral sessions across themes
09.25 – 09.40	15'	Coffee break	Transition to synergy hub
09.40 – 11.10	60'	Synergy Hub (Thematic Working Group)	Interactive networking among researchers, students, policymakers, and other stakeholders
11.10 – 12.30	80'	Lunch	Informal networking opportunity
12.30 – 13.40	90'	Poster Presentations	Parallel between poster sessions across themes

Plenary Session III: Health System Resilience & Global Governance

Moderator: Shita Listyadewi, S.I.P., MM, MPP

13.15 – 13.20	5'	Introduction to the plenary session III by Moderator	Moderator
13.20 – 13.35	15'	Financing Resilient Health Systems in the Face of Global Crises	Dr. Somil Nagpal Senior (Lead) Health Specialist, World Bank (Online)
13.35 – 13.50	15'	Measuring UHC Progress: What Indicators Matter Most for the Malaysian Healthcare System?	Assoc. Prof. Dr. Aznida Firzah Abdul Aziz Department of Family Medicine, Faculty of Medicine Universiti Kebangsaan Malaysia
13.50 – 14.05	15'	Driving University Collaboration for Global Health through the Sustainable Health Partnership (SHIP)	Prof. Maria Nilsson Chair of Lancet Countdown in Europe Umeå University (online)
14.05 – 14.20	15'	Harnessing Digital Transformation for Sustainable Health	dr. Lutfan Lazuardi, M.Kes., Ph.D Head of the Department of Health Policy and Management FKKMK UGM
14.20 – 14.35	15'	Global Public Goods for Health in the Fight Against Infectious Diseases	Prof. Ming Xu. MD, PhD Dean of the Department of Global Health, School of Public Health, Peking University (online)
14.35 – 14.50	15'	Discussion (Q&A session)	Moderator
14.50 – 15.00	10'	Summary and closing plenary session	Moderator
	5'	Transition	MC

TALKSHOW: Bridging Policy, Science, and Community Action for Sustainable Healthcare

Moderator: Prof. dr. Sofia Mubarika Haryana, M.Med.Sc, Ph.D*

15.05 – 15.10	5'	Opening and Introduction by Moderator	Moderator
15.10 – 16.10	60'	Talkshow & Interactive Discussion Policy talk/dialogue: Bridging Policy, Science, and Community Action for Sustainable Healthcare	<ul style="list-style-type: none"> - Prof. dr. Laksono Trisnantoro, MSc, PhD* - Prof. Dato' Dr. Syed Mohamed Aljunid - Prof. Virasakdi Chongsuvivatwong
16.10 – 16.25	15'	QnA	Moderator
16.25 – 16.30	5'	Summary	Moderator
Closing Session			
16.30 – 16.45	15'	Award Ceremony	MC
16.45 – 16.55	10'	Closing Remarks	dr. Lutfan Lazuardi, M.Kes., Ph.D Head of the Department of Health Policy and Management FKMKM UGM
16.55 – 17.00	5'	Closing the main event	MC

SYNERGY HUB

Synergy Hub: Where Ideas Meet and Collaborations Begin

Welcome to the **Synergy Hub**, a dynamic space designed to foster meaningful connections, spark innovative ideas, and drive collaboration among participants with shared interests in health and policy. This interactive platform brings together researchers, students, policymakers, and professionals to engage in vibrant discussions, exchange knowledge, and explore new opportunities for collaboration.

What's in it for you?

- Engage in dynamic discussions with peers and experts.
- Collaborate across sectors and disciplines, paving the way for impactful partnerships.
- Expand your network and gain new perspectives that can drive your research or policy work forward.

Themes to Explore:

- Health Financing and Resource Allocation
- Health Workforce and Community Participation
- Health Information, Innovation, and Service Delivery Transformation
- Governance and Leadership

Key Conversation Starters:

- **Health Financing:** Tackling the barriers to achieving Universal Health Coverage and exploring innovative ways to fund health systems.
- **Health Workforce:** Addressing workforce challenges and creating solutions to strengthen community health participation.
- **Service Delivery Transformation:** Harnessing technology and data to transform health service delivery for the future.
- **Governance:** Leading with resilience, engaging citizens, and ensuring effective governance for health systems.

PGF FOUNDERS



Prof. Em. Dato' Dr Syed Mohamed Aljunid

Professor of Health Economics and Policy, Universiti Kebangsaan Malaysia (UKM) and International Medical University (IMU), Malaysia

Prof. Dato' Dr. Syed Mohamed Aljunid is a renowned expert in health economics and policy, serving as Professor at UKM and IMU in Malaysia. With over 30 years of experience, he has contributed to health financing in more than 20 countries and is ranked among the top 2% most cited scientists globally. He has published over 300 works and supervised over 200 postgraduate students.

In his presentation, Prof. Aljunid will discuss the challenges in achieving Universal Health Coverage (UHC) in low- and middle-income countries, focusing on barriers like limited funding, high out-of-pocket expenses, and fragmented systems. He will explore innovative financing strategies to enhance health equity, including strategic purchasing, health insurance, and digital health solutions.



Prof. dr. Laksono Trisnantoro, MSc, PhD

Professor of Health Policy & Management, Faculty of Medicine, Public Health & Nursing, Universitas Gadjah Mada

Prof. dr. Laksono Trisnantoro, MSc, PhD is a Professor at Universitas Gadjah Mada (UGM), Indonesia, with over 30 years of expertise in health policy, hospital management, and public health. He holds a PhD from the London School of Hygiene and Tropical Medicine and an MSc in Health Economics from the University of York. Prof. Laksono has held key leadership roles, including Special Staff to the Minister of Health for Pharmaceutical and Medical Equipment Industry Resilience (2021–2024), and is a leading voice in Indonesia's health sector reform. In the Policy Dialogue session, Prof. Laksono will explore the intersection of science, policy, and community action in advancing sustainable healthcare. The session will address how to balance evidence, politics, and real-world experiences to shape health futures.



Prof. Dr. Supasit Pannarunothai, DTM&H., MSc., PhD

Professor of Health Equity and Health Financing Reform, Naresuan University; Chair, Centre for Health Equity Monitoring Foundation, Thailand

Prof. Supasit Pannarunothai is a leading public health scholar in Thailand, known for his pioneering work in health equity and financing reform. With training in medicine from Mahidol University and in health planning from the London School of Hygiene and Tropical Medicine, he has significantly contributed to universal health coverage in Thailand and the region. As former Dean at Naresuan University, he founded the Centre for Health Equity Monitoring and developed one of Asia's key case-mix and provider payment systems. Prof. Supasit continues to advise global agencies like the World Bank, WHO, and ASEAN on health financing and equity. He is also the Editor of the Journal of Health Systems Research and a key advocate for evidence-based policy in Southeast Asia.



SPEAKERS AND PRESENTATION OVERVIEW



KEYNOTE AND OPENING SESSION

Prof. dr. Yodi Mahendradhata, M.Sc, **Dean Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada (UGM)**

Prof. Yodi Mahendradhata is a global health and health systems expert with over 20 years of experience in research, policy, and academic leadership. As Dean of Universitas Gadjah Mada's medical faculty, he has been at the forefront of strengthening health systems and improving responses to challenges like tuberculosis and pandemics in Indonesia and Southeast Asia. He works closely with international organizations such as WHO and TDR, and serves on global panels focused on



translating evidence into health policy. With a background in medicine, public health, and policy, Prof. Yodi is committed to building more equitable and resilient health systems in low- and middle-income countries.



Prof. dr. Dante Saksono Harbuwono, Sp.PD-KEMD, Ph.D.

Deputy Minister of Health, Republic of Indonesia

Prof. Dante Saksono Harbuwono is the Deputy Minister of Health of Indonesia, appointed in 2020. With a background as a professor and endocrinologist, he has led major academic and clinical institutions including the Metabolic-Endocrine Division at Cipto Mangunkusumo Hospital and the Faculty of Medicine, University of Indonesia. He completed his Ph.D. in molecular diabetes in Japan and has been deeply involved in national health research and professional medical associations. As Deputy Minister, he

plays a key role in strengthening primary care, improving non-communicable disease prevention, and advancing Indonesia's health system reforms through evidence-based approaches.

PLENARY SESSION I: INNOVATIONS AND SOLUTIONS FOR SUSTAINABLE HEALTH SYSTEMS

dr. Then Suyanti, MM

**Director of Environmental Health,
Ministry of Health, Indonesia**

dr. Then Suyanti, MM is the Director of Environmental Health at Indonesia's Ministry of Health. She brings over 20 years of experience in health service governance. Dr. Then has led innovations in health, such as integrated emergency systems and maternal health applications, as Head of the Bangka District Health Office. She has represented Indonesia in international forums on primary care, environmental health, and sustainable development, and is recognized for her leadership in public health innovation. In her presentation, Dr. Then will discuss the



Ministry of Health's strategy for advancing environmentally friendly healthcare services, focusing on sustainable practices and the integration of eco-friendly solutions in the healthcare system.



Prof. dr. Ali Ghufon Mukti, M.Sc., Ph.D., President Director, BPJS Kesehatan, Indonesia

Prof. dr. Ali Ghufon Mukti, M.Sc., Ph.D. is the President Director of BPJS Kesehatan, Indonesia's national health insurance agency, with decades of experience in health financing and policy. A former Vice Minister of Health, he has held key roles including Acting Minister of Health and Chair of Indonesia's COVID-19 Research and Innovation Consortium. Prof. Ghufon has trained in medicine, public health, and epidemiology across Indonesia, Thailand, and Australia, and is active internationally in health policy

forums.

Throughout his talk, Prof. Ghufon will discuss strategies for aligning Universal Health Coverage (UHC) with preventive and primary care within Indonesia's national health insurance system to enhance service integration and accessibility.

Prastuti Soewondo, S.E., M.P.H., Ph.D.

Special Advisor on Health Financing to the Minister of Health, Indonesia

Dr. Prastuti Soewondo, S.E., M.P.H., Ph.D. is a health economist and policy expert. She also holds a senior academic position at the University of Indonesia. Dr. Soewondo has been instrumental in shaping Indonesia's health insurance policies, focusing on primary care and provider payment reform. As an active member of INAHEA, she works to strengthen health system financing through research and policy collaboration, both locally and internationally.



During her talk, Dr. Soewondo will explore strategic health financing approaches aimed at ensuring system sustainability amid global realignments, with an emphasis on achieving inclusive and resilient health coverage in Indonesia and beyond.



Dr. dr. Darwito, S.H., Sp.B.Subsp.Onk. (K)

President Director, Universitas Gadjah Mada Academic

Dr. dr. Darwito, S.H., Sp.B.Subsp.onk. (K) is a surgical oncologist and hospital leader, currently serving as President Director of Universitas Gadjah Mada Academic Hospital (RSA UGM). With a unique background that blends medicine, surgery, and law, he also teaches at the Faculty of Medicine, Public Health and Nursing. Dr. Darwito has led several major public hospitals in Indonesia, including RSUP Dr. Sardjito and RSUP Dr. Kariadi, and has introduced innovations such as robotic orthopedic surgery at RSA UGM. His

leadership focuses on quality, patient safety, ethical medical education, and good governance, contributing to the advancement of Indonesia's academic health system.

Dr. Darwito will discuss strategies for advancing healthcare innovation and quality improvement in academic hospitals, focusing on the integration of cutting-edge technology and ethical governance to enhance patient care and expand access to services.

PLENARY SESSION II: STRENGTHENING COMMUNITY AND PREVENTIVE HEALTH

Dr. Maarten Kok Assistant Professor, Erasmus University Rotterdam & VU Amsterdam

Dr. Maarten Kok is an expert on global health systems, governance, and policy innovation, especially in low- and middle-income countries. His research covers AI in policy making, health reforms in Indonesia, and sustainable entrepreneurship in Uganda and Kenya. He advises governments and international organizations on health policy design.

In his presentation, Can AI Help Us Decide? Are More Expensive Medicines Worth It?, Dr.



Kok will explore Indonesia's efforts to lower drug prices and compare the effectiveness of cheaper vs. expensive medicines. He will also examine how AI can assist in evaluating medicine value, based on a systematic review and AI-supported methods.



Prof. Quazi Monirul Islam

Professor, Prince of Songkla
University, Thailand; Former

Prof. Monirul Islam is a global leader in health systems and public health, with over 125 countries' experience. Formerly a senior official at the World Health Organization, he has shaped global guidelines on reproductive health and maternal care. A physician and public health expert, Prof. Islam teaches at institutions in Thailand, the UK, and Japan, while continuing to advise governments and development partners.

In his talk, Prof. Islam will discuss the evolving public health challenges of the 21st century,

focusing on the shift to non-communicable diseases, demographic changes, and the need for global cooperation to address health inequities and emerging threats. He will emphasize the role of strong health systems and multi-sectoral leadership in achieving the Sustainable Development Goals.

Prof. Dr. Tuti Ningsih Mohd Dom

Professor and Dean, Faculty of Dentistry, Universiti Kebangsaan Malaysia (UKM)

Prof. Tuti Ningseh Mohd-Dom is a public health dentist and educator. Her academic work spans oral health literacy, community-based care, health system strengthening, and the integration of dental services into broader non-communicable disease prevention. She has initiated innovative tools such as digital learning platforms and a national periodontal health portal to improve professional practice and public awareness. Prof. Tuti collaborates widely across disciplines and sectors, and



serves in advisory roles on health literacy and oral health policy. Her work reflects a strong belief in community engagement, cross-sector partnerships, and inclusive approaches to strengthening health systems through oral health.



Prof. Tippawan Liabsuetrakul

Professor of Epidemiology and Director, WHO Collaborating Centre, Prince of Songkla University, Thailand

Prof. Tippawan Liabsuetrakul is a physician and epidemiologist with deep expertise in maternal health, health systems, and global health research. With academic training in obstetrics-gynecology and epidemiology, she has led research and advisory work across Asia and Africa, supporting health system reforms and maternal and newborn surveillance in countries such as Bhutan, Nepal, Myanmar, and South Africa. Her work spans maternal and adolescent health, infectious and non-communicable diseases, quality of care, and

economic evaluation. Recognized with multiple awards for research and academic service, she has authored over 180 international publications and continues to mentor emerging scholars while advancing evidence-informed policy and practice in global health.

Assoc. Prof. Dr. Mohd Fairuz Ali

Family Medicine Consultant and Senior Lecturer, Universiti Kebangsaan Malaysia (UKM)

Assoc. Prof. Dr. Mohd Fairuz Ali leads the Long-Term Stroke Clinic and serves as Course Director for the Clinical Fellowship in Community Stroke Care. His work focuses on community-based stroke rehabilitation, dementia care, and aging in primary healthcare. With medical training in Malaysia and Australia, he brings both local expertise and international perspectives to his teaching and clinical practice. He is also active in humanitarian work through the Malaysian



Relief Agency, providing medical support to underserved communities. As a passionate educator and researcher, Dr. Fairuz regularly contributes to public and professional education, and has published widely on topics such as cognitive impairment, caregiver

PLENARY SESSION III: HEALTH SYSTEM RESILIENCE & GLOBAL GOVERNANCE

Dr. Somil Nagpal Senior (Lead) Health Specialist, World Bank

Dr. Somil Nagpal is a health financing expert and Senior Health Specialist at the World Bank, leading health and nutrition programs in Southeast Asia. He combines clinical expertise with policy knowledge. Dr. Nagpal previously helped establish India's health insurance regulatory framework and worked with national ministries and the WHO. His work focuses on universal health coverage, quality care, and financial protection in health systems.



In his presentation, Dr. Nagpal will discuss financing resilient health systems amid global crises, exploring strategies to strengthen health systems for better sustainability, financial protection, and access to quality care during emergencies.



Assoc. Prof. Dr. Aznida Firzah Abdul Aziz Family Medicine Specialist and Health Systems Researcher, Universiti Kebangsaan Malaysia (UKM)

Assoc. Prof. Dr. Aznida Firzah Abdul Aziz is a Family Medicine specialist and health systems researcher at Universiti Kebangsaan Malaysia (UKM). The first Family Medicine specialist in Malaysia to earn a PhD in public health, her work focuses on strategic purchasing, primary care reform, and economic evaluation in clinical practice. She is the developer of iCaPPS®, an integrated care pathway for post-stroke patients, and leads research on shared care models, dementia, and oral-systemic

health.

During her talk, Dr. Aznida will examine the critical indicators for assessing Universal Health Coverage (UHC) progress in Malaysia, with an emphasis on primary care access, maternal and child health, and financial protection. She will discuss policy challenges and provide actionable recommendations to enhance UHC measurement, including digital solutions and data-driven strategies.

Prof. Maria Nilsson

Professor of Public Health, Umeå University, Sweden

Prof. Maria Nilsson is a public health expert at Umeå University, Sweden, specializing in climate change and health. Her research focuses on climate adaptation, vulnerable populations, heat exposure, mental health impacts of extreme weather, and community risk communication. Prof. Nilsson contributed to the 2015 Lancet Commission on Health and Climate Change and co-led the Lancet Countdown's work on health system resilience until 2024. She chairs the Lancet Countdown



in Europe and leads the Catalyse project's knowledge translation group.

In this session, Prof. Nilsson will present the Sustainable Health in Partnership (SHIP) platform, emphasizing its role in addressing global health challenges and promoting



dr. Lutfan Lazuardi,

M.Kes., Ph.D

Head, Department of Health Policy and Management, Universitas Gadjah Mada

Dr. Lutfan Lazuardi, M.Kes., Ph.D. is a physician and digital health expert, currently heading the Department of Health Policy and Management at Universitas Gadjah Mada. His work focuses on health information systems, telemedicine, and digital innovations in public health. Dr. Lutfan has contributed to national initiatives on electronic immunization registries, portable health clinics, and health data interoperability.

In his session, Dr. Lazuardi will outline a transformative strategy to strengthen

Indonesia's healthcare system by integrating digital health and climate resilience. He will discuss the role of digital tools like electronic health records and telemedicine in improving healthcare delivery, while promoting net-zero emissions in hospitals. Through public-private collaborations and strategic investments, Indonesia aims to build a sustainable, climate-resilient healthcare system.

Prof. Ming Xu. MD, PhD

Dean, Department of Global Health, Peking University

Prof. Ming Xu, MD, PhD is the Dean of the Department of Global Health at Peking University and Associate Dean at the Institute for Global Health and Development. With expertise in international economics and health policy, Prof. Xu has held senior roles at the Global Fund, the United Nations, and China's Ministry of Commerce. He contributes to national health policy reform in China and serves on global advisory panels, including the WHO's TAG on Local Production and the



Pandemic Fund's Technical Advisory Panel. Prof. Xu will explore the concept of global public goods for health, focusing on the procurement of products to treat and prevent infectious diseases in developing countries.



Prof. Virasakdi Chongsuvivatwong

Professor of Epidemiology, Prince of Songkla University, Thailand

Prof. Virasakdi Chongsuvivatwong is a highly respected epidemiologist and public health researcher at Prince of Songkla University, Thailand. With over four decades of experience, he has led significant work on health equity, infectious disease control, and health system development, especially in border and conflict-affected areas of Southeast Asia. Prof. Virasakdi has contributed to international research collaborations with WHO, IDRC, and multi-country consortia. He is a strong advocate of South-South

cooperation and has trained numerous public health professionals across Asia. His extensive publications span a wide range of global health issues, shaping policy and practice in both regional and global health contexts. In the policy dialogue session, Prof. Virasakdi will contribute his expertise in bridging policy, science, and community action to promote sustainable healthcare solutions.

POLICY DIALOGUE: BRIDGING POLICY, SCIENCE, AND COMMUNITY ACTION FOR SUSTAINABLE HEALTHCARE

This session will reflect on the complexities of advancing sustainable healthcare, focusing on the intersection of science, policy, and community realities. The discussion will explore how evidence, politics, and lived experiences can be balanced to shape the future of healthcare.



Prof. dr. Laksono Trisnantoro,
MSc, PhD



Prof. Dato' Dr. Syed Mohamed
Aljunid



Prof. Virasakdi
Chongsuvivatwong

The speakers will join this dialogue, bringing their diverse perspectives to discuss the integration of policy, science, and community action. They will explore strategies for building health systems that are both effective and sustainable, addressing key challenges and opportunities in achieving equitable healthcare for all.



ORAL & POSTER PRESENTATION LIST

ORAL PRESENTATION

DAY 1 : 17TH JUNE 2025

(TUESDAY)

Day-Room ID	Title	Time Slot	Page
Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing			
D1S1-R1-OP41	Trapped in the Menu: How the Rigidity of BOK Funding Limits Health Program Planning Based on Local Needs at the Puskesmas in Baubau City? Candra	11.00-11.10	
D1S1-R1-OP3	Cost-Effectiveness of Employee Assistance Programs (EAPs) for Mental Health Support Among Employees in Malaysian Workplaces Diong Gar Loon, Prof Emeritus Dato', Dr Syed Mohamed Aljunid	11.12-11.22	
D1S1-R1-OP65	Strengthening Hospital Resilience: The Role of Manager on Duty in Optimizing Patient Management under Indonesia's BPJS Scheme Suwandhi Andhi	11.24-11.34	
D1S1-R1-OP66	Health Operational Assistance Fund: Decision Space, Institutional Capabilities, and Accountability in Indonesian Primary Health Centers Muhamad Faozi Kurniawan, Bondan Wicaksono Adhi, Ika Septiana Eryani, Andreasta Meliala, and Mubasysyir Hasanbasri	11.36-11.46	
D1S1-R1-OP6	Game-Based Circuit Exercise Enhances Function, Self Efficacy And Quality Of Life Of Stroke Survivors: A Randomised Controlled Trial Mohd Naquiuddin Johar, Nor Azlin Mohd Nordin, Aznida Firzah Abdul Aziz	11.48-11.58	
D1S1-R1-OP78	Strengthening Health Insurance Sustainability through Cross-Sector Contribution Collection Efforts: A Case Study at BPJS Kesehatan Main Branch Manado Andry Budiarjo, Diah Ayu Puspandari	12.00-12.10	
Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion			
D1S1-R2-OP8	Variations in Self-reported Hand Hygiene Behavior by Socioeconomic Status among Residents of Korail Slum, Dhaka Md Mostafizur Rahman, Wit Wichaidt	11.00-11.10	
D1S1-R2-OP11	Effectiveness of the Community Chronic Kidney Prevention Model for delaying chronic kidney disease progression Watchraphong Wisansak, Leesmidt V.	11.12-11.22	
D1S1-R2-OP48	Implementation of Mental Health Program for Managing People with Mental Disorders (ODGJ) Based on Community Engagement at Lembeyan Health Center Area : A Case Study Fadliana Hidayatu R, Mubasysyir Hasanbasri, Lusha Ayu Astari	11.24-11.34	
D1S1-R2-OP12	The role of housing conditions in the development of tuberculosis (TB) among individuals exposed to a TB patient	11.36-11.46	

	in the home and residing in Padang, West Sumatra Province, Indonesia. Ringga Rahmi Prima, Alan Frederick Geater	
D1S1-R2-OP13	Policy Recommendations on Strengthening Nursing Leadership To Address Workforce Challenges: A Review And Policy Recommendations Masilawati Binti Md Asim	11.48-11.58
D1S1-R2-OP39	Strategies to Improve Retention and Coverage in Indonesia using Global Best Practices on Health Workforce Deployment: A Scoping Review Dwi Asih Kartika Ningrum, Dumilah Ayuningtyas, Ferry Effendi, Likke Prawidya Putri, Hariman Hendarwan, Puput Oktamianti, Mieska Despitarsari, Zakiyah Eke, Maria Intan Josi	12.00-12.10

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D1S1-R3-OP53	Integrating Patient-Centered Design and User Engagement in Digital Health : A Protocol for Self Management Application in Adult CHD Patients Resia Perwirani, Lucia Kris Dinarti, Lutfan Lazuardi	11.00-11.10
D1S1-R3-OP17	Development, Feasibility and Economic Evaluation of Teleconsultation Care Pathway for Older Patients with Noncommunicable Diseases at an Academic Primary Care Clinic in Malaysia Mya Win Hnit, Aznida Firzah Abdul Aziz, Chai-Eng Tan, Mohd Fairuz Bin Ali	11.12-11.22
D1S1-R3-OP71	Data Quality and Influencing Factors of Medical Devices at Primary Health Care Centers in a Rural Area of Yogyakarta Special Region Ina Amali Fauziah	11.24-11.34
D1S1-R3-OP19	Development of Rapid Response System for the Management and Prevention of Child Malnutrition at the Primary Care and Community Levels: A study protocol Dzikri Fadhilah, Lutfan Lazuardi, Digna Niken Purwaningrum, Adi Utarini	11.36-11.46
D1S1-R3-OP21	Determinants of Wearable Health Monitoring Device Adoption: The Role of Health Beliefs and Technology Acceptance in Klang Valley Goh Lay Khim	11.48-11.58

Room 4 - U25A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D1S1-R4-OP59	Diurnal variation in distance, space, and location transition probability of free-roaming dogs in a co-existing area of local communities and tourists, Thailand Thanidtha Te-Chaniyom	11.00-11.10
D1S1-R4-OP24	Knowledge, attitudes, and practices on smoking cessation and prevention laws among patients in a tertiary hospital and community clinic outpatient clinics Louie F. Dy, Krizzia Rae B. Jabonillo, Dena Mae Amor N. Desabille-Deblois, Reina Juno U. Sumatra, Lia M. Palileo-Villaneuva	11.12-11.22
D1S1-R4-OP62	A Latent Class Analysis of Student Eye Care Behavior: Evidence from 6–18-Years-Old in Indonesia Muhammad Asroruddin, Wiwik Windarti, Agus Fitriangga	11.24-11.34
D1S1-R4-OP27	Primary Care Doctors' Attitude Toward Patients with Mental Illness in Public Primary Healthcare Services in Kuching,	11.36-11.46

Sarawak

Syed Mohd. Taufiq Wan Obeng, Aznida Firzah Abdul Aziz, Mohd Fairuz Ali

D1S1-R4-OP28	Stakeholder Perspectives on Improving Access to Domiciliary Oral Care for Older Adults Haslina Rani, In Meei Tew, Muhammad Syafiq Asyraf Rosli, Aznida Firzah Abdul Aziz, Nur Saadah Mohamad Aun, Siti Aisya Athirah Hassan, Tuti Ningseh Mohd Dom	11.48-11.58
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Room 5 - U25B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

D1S1-R5-OP29	Illicit Drugs Potential for Medical Use, Focus on Opioid : Student Perception Survey Trowce Lista	11.00-11.10
D1S1-R5-OP30	Optimising Strategic Purchasing for Pharmaceutical Procurement Services in the Malaysian Healthcare System Wei Chern Ang, Aznida Firzah Abdul Aziz, Aniza Ismail, Nurul Ain Mohd Tahir, Syed Mohamed Aljunid Syed Junid	11.12-11.22
D1S1-R5-OP32	Cost-Effectiveness Study of Service and Mobile App Usage in Mentari and Outpatient Psychiatry Clinics in Malaysia Adieza Farahain	11.24-11.34
D1S1-R5-OP82	Guessing the Opportunities for the Involvement of the Association of Southeast Asian Nations (ASEAN) as an Alternative Donor in Eradicating Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) in Indonesia Ihsan Septian Tome	11.36-11.46
D1S1-R5-OP101	The Relationship Between Primary Health Center Accreditation Status and Patient Satisfaction at the Gunung Sari Ulu Primary Health Center, Balikpapan in 2023 Nursakti, Ratno Adrianto	11.48-11.58
D1S1-R5-OP34	Cost-Effectiveness Analysis of Malaria Intervention Program: A Scoping Review Misra Helma Firdaus, Sharifa Ezat Wan Puteh, Dina Syazana Ho Imran, Mohd Rizal Abdul Manaf	12.00-12.10

Room 6 - R.201 IKM Building 2th Floor : Community-Centered Health and Health Workforce Promotion

D1S1-R6-OP83	Scoping Review of Surveillance system of Snakebite Dewi Yuniasih, Adi Utarini, Lutfan Lazuardi	11.00-11.10
D1S1-R6-OP36	Beliefs, Attitudes, And Agreement With Treatment For Drug Abuse Amongst Final Year Medical Students In Imu University Khairunniza Gharib, Siew Wei Fern	11.12-11.22
D1S1-R6-OP37	Attitudes and barriers affecting human papillomavirus vaccine uptake among Asian American women and their differences across ethnic subgroups Campbell Loi	11.24-11.34
D1S1-R6-OP38	Youthful but Vulnerable: Age Structure and Retention Risks in Indonesia's Health Workforce Dwi Asih Kartika Ningrum	11.36-11.46
D1S1-R6-OP40	Empowerment of Santri Husada as an Effort to Strengthen the Organization and Sustainability of the Health System in	11.48-11.58

Islamic Boarding Schools
Achmad Ali Machfud

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

D1S2-R1-OP2	Strengthening Resilient Integrated Health Systems through Sustainable Health Financing Policies: Addressing Financial Barriers to Respite Care Utilization among Informal Stroke Caregivers in Kedah, Malaysia Ahmad Hazri Ilyas, Aznida Firzah Abdul Aziz, Mohd Fairuz Ali	13.30-13.40
D1S2-R1-OP42	Patient Experience of an Integrated Primary Healthcare Model in West Sumbawa District, Indonesia Mentari Widiastuti, Shita Listya Dewi, Sandra Olivia Frans, Siti Nurfadilah, Putri Listiani, Rizki Tsalatshita Khair Mahardya, Hermawati Setyaningsih, Ery Setiawan, Ulfathea Mulyadita, Jefrianus Rouki, Trihono Trihono, Maria Endang Sumiwi, Mubasysyir Hasanbasri	13.42-13.52
D1S2-R1-OP44	Evaluation of Tuberculosis Control Program at Prof. Soedomo Dental and Oral Hospital, Gadjah Mada University in 2023 Putri Ardhani, Puput Oktamianti	13.54-14.04
D1S2-R1-OP7	Validation of Questionnaire for Assessing Patient Safety Culture: Knowledge, Awareness, Attitudes & Practice Among Medical Doctors Sharifah Balqis Sayed Abdul Hamid	14.06-14.16
D1S2-R1-OP79	Analysis of Healthcare Service Utilization by Residents Registered by the Regional Government under the National Health Insurance Program in Labuhanbatu Regency Sylvana Dyna Theresia, Diah Ayu Puspandari	14.18-14.28

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

D1S2-R2-OP9	Occupational Traits and Burnout among COVID-19 Emergency Responders on the China-Myanmar Border: A Mixed Method Study Xizhuo Xie	13.30-13.40
D1S2-R2-OP50	Community Social Support for People with Stigmatized Illnesses: A Qualitative Study on Tuberculosis, HIV/AIDS, and Schizophrenia Ahmad Naufal, Widayanti, Anna Wahyuni	13.42-13.52
D1S2-R2-OP51	The Effectiveness Of Online Mindfulness Intervention On The Quality Of Life Among Ukm Staff Who Are Overweight And Obese Mohd Izhar Ariff, Mohd Rizal Abdul Manaf, Nor Ba'lah Abdul Kadir	13.54-14.04
D1S2-R2-OP52	Integration of Community Empowerment and Stakeholder Engagement for Sustainable Sanitation in Tanggamus Regency Vera Yulyani, Fatwa Sari Tetra Dewi, Iswanto	14.06-14.16
D1S2-R2-OP14	Association between Family and Peer Smoking Behaviors and Own Smoking Status: Preliminary Findings from University-Based Surveys in Vietnam Manh Cuong Vu, Wit Wichaidit	14.18-14.28

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D1S2-R3-OP15	Provider Quality of Hospital Information System: Implications for Healthcare Performance Sustainability in Malaysian Public Hospitals Mohd Rizal Abdul Manaf, Muhd Siv Azhar Merican Abdullah, Azimatun Noor Aizuddin	13.30-13.40
D1S2-R3-OP54	Data Quality Challenges In Emrs For Schizophrenia: Gaps In Completeness And Consistency Nandani Kusuma Ningtyas, Lutfan Lazuardi	13.42-13.52
D1S2-R3-OP55	A digital twin-driven machine learning model for predicting air pollution and respiratory disease Amja Manullang, Christophe Viavattene, Xiaohong Gao, Huan Nguyen	13.54-14.04
D1S2-R3-OP56	The Urgency of Strengthening Measles-Rubella Surveillance Through Integrated and Interoperable Health Information System Ina Amali Fauziah, Khairani Fauziah, Guardian Yoki Sanjaya, Bie Novirenallia Umar	14.06-14.16
D1S2-R3-OP57	Evaluating the Adoption of Smartwatch-Based Patient Monitoring Systems to Promote a Healthy Campus: A Study among the UGM Academic Community Fajrul Falah Farhany, Ina Amali Fauziah, Hanifah Wulandari	14.18-14.28
D1S2-R3-OP58	Structuring Health Metadata for Sustainability: The SATUSEHAT Metadata Approach Sensa Gudya Sauma Syahra, Ardhina Nugrahaeni, Hanifah Maharani, Fadhilah Khairuna Larasati, Lusha Ayu Astari, Anis Fuad, Guardian Yoki Sanjaya, Dini Prasetyawati, Rio Aditya Pratama, Hendri Kurniawan Prakosa, Saiful Anwar	14.30-14.40

Room 4 - U25A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D1S2-R4-OP22	Development and Validation of a Malay-Version Questionnaire on Incident Reporting Practices and Associated Factors Among Public Primary Healthcare Workers Hanis Abdul Rani	13.30-13.40
D1S2-R4-OP26	Experiences of Service Recipients in Intermediate Care Systems: A Qualitative Study in Two Pilot Sites of Thailand Nalinee Nakittipha Chuakhamfoo, Thi Hue Man Vo, Thaworn Sakunphanit, Phudit Tejavattaddhana	13.42-13.52
D1S2-R4-OP63	Health Policies Approach in Controlling Electric Cigarette Use Among Indonesian Youth Group Nita Juniarsih	13.54-14.04
D1S2-R4-OP64	Evaluating Technology-Enabled Primary Healthcare Interventions for Managing Non-Communicable Diseases Linked to Air Pollution in Indonesia: A Study Protocol Harun Al Rasyid, Asri Maharani, Anna Palagyi, Hari Kusnanto Josef	14.06-14.16
D1S2-R4-OP97	Unlocking Sustainable Healthcare: Is Green HRM the Key? A Systematic Literature Review Andang Evrilianto, Yaslis Ilyas	14.18-14.28

Room 5 - U25B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

D1S2-R5-OP4	Relationship of Lean Adoption and Operational Performance: Validation of a Questionnaire to Assess Perception Among Healthcare Professional	13.30-13.40
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Supported by:

	Azizul Rahman Mohamad Jamil	
D1S2-R5-OP5	Cost-effectiveness of a Structured, Multi-Component Training Program for Family Caregivers of Persons with Parkinson's Disease Nur Izyan Mohd Amin, Nor Azlin Mohd Nordin, Aniza Ismaili	13.42-13.52
D1S2-R5-OP67	Stakeholder Perspectives on Funding Sustainability for Engaging Private Primary Health Care in Tuberculosis Control: A Qualitative Case Study in Depok Indonesia Dhea Keyle Fortunandha	13.54-14.04
D1S2-R5-OP68	Improving Quality in Primary Health Care (Puskesmas): The Role of District Health Office Supervision in Sleman, Indonesia Yumna Nur Millati Hanifa	14.06-14.16

Room 6 - R.201 IKM Building 2nd Floor : Health Data Innovation and Digital Transformation

D1S2-R6-OP18	Determinants of Virtual Consultation Service Acceptance in Antenatal Care Halila Mohamed, Aniza Ismail, Rosnah Sutan	13.30-13.40
D1S2-R6-OP72	Evaluating User Engagement with NusaCare: A Self-Management App for Diabetes and Prediabetes Hendri Kurniawan Prakosa, Annisa Ristya Rahmanti, Guardian Yoki Sanjaya, Anis Fuad, Sensa Gudya Sauma Syahra, Candra, Milleen Rahman Hakim	13.42-13.52
D1S2-R6-OP73	Implementation of the SIKAL in BPAFK Surakarta: A Digital Innovation to Strengthen Medical Device Quality Assurance Tia Pramesti Nur Jannah, Rohmadi, Noviana Margiastuti	13.54-14.04
D1S2-R6-OP74	Mobility and Malaria Incidence in Indonesia's Low-Endemic Areas during the COVID-19 Period Risalia Reni Arisanti, Ahmad Watsiq Maula, Riris Andono Ahmad, Adi Utarini	14.06-14.16
D1S2-R6-OP75	Nusa Care and SmartHealth Mobile: Supporting Integrated Health Data Management in Primary Care Nela Afirda Prastika, Hendri Kurniawan Prakosa, Hanifah Wulandari	14.18-14.28
D1S2-R6-OP76	Improving The Quality Of Health Information Through Evaluation Of Electronic Medical Record Data Quality Muhriati, Lutfan Lazuardi	14.30-14.40

ORAL PRESENTATION

DAY 2 : 18TH JUNE 2025 (WEDNESDAY)

Day-Room ID	Tittle	Time Slot	Page
Room 1 - Auditorium FKKMK : Community-Centered Health and Health Workforce Promotion			
D2S1-R1-OP35	"Kiambang Merah" : A Tripartite Collaborative Framework for Social Entrepreneurship in Addressing Period Poverty Nor Faiza Mohd Tohit, Siti Athirah Zafirah Abdul Rashid, Wan Farizatul Shima Wan Ahmad Fakuradzi, Nur 'adnin Ahmad Zaid	08.10-08.20	
D2S1-R1-OP84	Building Health System Resilience through Acceptability: A Study on Child Violence Response Programs in Medan City's Primary Health Care Annisa Zahara, Likke Prawidya Putri, Tiara Marthias	08.22-08.32	
D2S1-R1-OP85	Feasibility of Implementing the Cardiovascular Network Fostering Program in Yogyakarta Special Region: Perspectives of Health Workers and Stakeholders Nida Fauziah Sudrajat, Michel Kezia Yosephine	08.34-08.44	
D2S1-R1-OP86	Physician-Manager in Crisis: Legal Clarity for Dual Roles to Strengthen Indonesia's Hospital Resilience Luh Virsa Paradissa	08.46-08.56	
D2S1-R1-OP88	Community-Based Supervision Mechanism in South Manokwari District Agus Salim, Faisal Mansur, Mubasysyir Hasanbasri	08.58-09.08	
Room 2.3 - R.8AB Tahir Building 8th Floor : Health Data Innovation and Digital Transformation			
D2S1-R2-OP89	Learning Methods for Clinical Terminology: A Scoping Review Nanda Aula Rumana, Arief Budiyo, Lutfan Lazuardi, Savitri Citra Budi	08.10-08.20	
D2S1-R2-OP90	Barriers and Enablers in Implementing Telemedicine at RS Pratama Sailus, Pangkep Regency's Remote Islands: Advancing Healthcare Access Renaldi	08.22-08.32	
D2S1-R2-OP91	Evaluation of Dashboard Utilization in Emergency Department: A Mixed-Method Study Happy Indah Kusumawati, Syahirul Alim, Luluk Lusiantoro, Adi Utarini	08.34-08.44	
D2S1-R2-OP92	The Role of the ASPAK System in Cathlab Distribution for Cardiac Programs Review and Recommendations for Development Vivi Ninda Sutriana, Anis Fuad, Guardian Yoki Sanjaya, Rio Aditya Pratama, Khairani Fauziah	08.46-08.56	
D2S1-R2-OP93	Automated Conversion of Indonesian Electronic Medical Records to SNOMED-CT Using OpenAI: A Case Study at Surya Husadha Hospital Putu Gede Purwa Darmawan	08.58-09.08	
D2S1-R2-OP94	Upskilling Cadres on Digitising Integrated ANC Records (Study in Kecamatan Pakisaji, Kabupaten Malang) Ayunda Dewi Jayanti Jilan Putri	09.10-09.20	
Room 4.5 - U25AB Tahir Building 2th Floor: Evidence-Based Policy Action and Sustainable Green			

Healthcare

D2S1-R4-OP95	Enhancing Patient Safety in Puskesmas: Cross-Section Collaboration at Yogyakarta's DHO Muhammad Hafiz Haunan	08.10-08.20
D2S1-R4-OP96	Toward Carbon-Neutral Hospitals: A Systematic Review of Policy Instruments and Green Health Infrastructure in Asia-Pacific Countries Andang Evrilianto, Hermawan Saputra, Sheila Rizkia Anjari	08.22-08.32
D2S1-R4-OP98	The Advantages and Challenges of Teleophthalmology Practice in Underserved Population and in Low and Middle Income Countries: A Scoping Review Muhammad Asroruddin, Muhammad Bayu Sasongko, Lutfan Lazuardi	08.34-08.44
D2S1-R4-OP100	Evaluation of Primary Health Care Integration Implementation at Nirunmas District Health Center, Tanimbar Islands Regency Renghart Feninlambir, Mubasysyir Hasanbasri, Likke Prawidya Putri	08.46-08.56

POSTER PRESENTATION

DAY 2 : 18TH JUNE 2025 (WEDNESDAY)

Day-Room ID	Title	Time Slot	Page
Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing			
D2S2-R1-PP2	Translation, Cross-Cultural Adaptation, and Validation of the Patient Participation Questionnaire (PPQ) into the Malay Language Siti Norhani Mazrah binti Khalid	12.10-12.15	
D2S2-R1-PP3	Key challenges and strategies for humanitarian response in Sudan An analysis of the scope of need in the present crisis and recommendations for future action Campbell Loi	12.17-12.22	
D2S2-R1-PP4	Double Burden of Infection and Sociodemographic Disadvantage among Men Who Have Sex with Men Living with HIV in Surakarta, Indonesia Yeny Ristaning Belawati	12.24-12.29	
D2S2-R1-PP7	Analysis of Pending Claims in 2024 Neurosurgical Cases and Their Impact on Hospital Financing at RS LMC under the National Health Insurance Nurmarani Fatin Hafifatin	12.31-12.36	
D2S2-R1-PP8	Transforming Pediatric Care: Assessing the Impact of Integrated One-Stop Service on Health System Resilience at JIH Hospital Yogyakarta Ratih Fitriani, Cita Aulia Nisa	12.38-12.43	
Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion			
D2S2-R2-PP9	Association between Financial Health and Mental Health Outcomes among a General Population of Adults in a Peri-Urban Community in Thailand	12.10-12.15	

	Wit Wichaidt	
D2S2-R2-PP43	Promoting Correct Toothbrushing Timing Through Community Engagement and Empowerment: A Literature Review Echi Febriyani FN	12.17-12.22
D2S2-R2-PP13	Contraceptive Knowledge and Attitudes in Malaysia's Urban Poor: A Community-Based Assessment Siti Hajar Adam	12.24-12.29
D2S2-R2-PP49	Igniting Youth Potential in Public Health Programs Okatiranti, Upik Rahmi, Desy Nuryunarsih, Eva Supriatin, Anggi Sahputra, Ade Mubarak	12.31-12.36
D2S2-R2-PP16	Strengthening Community Health Outcomes through Corporate Social Responsibility Philanthropy Programs: Effects on the Developmental Scales of Children with Special Needs Undergoing Multidisciplinary Therapies at Grha Husada Hospital in 2024 Koes Maureen Yoshinaga	12.38-12.43

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D2S2-R3-PP18	The Analysis of Health Facility Coverage Radius Mapping in Palu city, Central Sulawesi Province Renata Gita Cahyani Sese	12.10-12.15
D2S2-R3-PP20	Accelerating Pharmacy Services Through Digitalization and Automated Dispensing Systems: A Digital Transformation Initiative for Pharmacy Services in Hospital Setting Cita Aulia Nisa, Ratih Fitriani	12.17-12.22
D2S2-R3-PP21	Proposed Framework for Auditing Super-Admin Access Risks Among Indonesia's 1,057 SatuSehat-Integrated EMR Vendors Yuni Astuti	12.24-12.29
D2S2-R3-PP22	Evaluation Of Hospital Management Information System (Hmis) Implementation At Prof.Dr.R. Soeharso Orthopedic Hospital Surakarta Through The Hot-Fit Method Oliva Virvizat Prasastin	12.31-12.36
D2S2-R3-PP23	Comparison Analysis of Patient Safety Incident Reporting Systems Based on Technology in Indonesia and Japan: Implications for Strengthening Patient Safety Culture Mentari Riauana	12.38-12.43

Room 4 - U25A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D2S2-R4-PP26	Effectiveness of a TPB-Based Educational Intervention in Improving Attitudes, Norms, and Behavioral Control Toward Patient Safety Behaviors among Public Hospital Nurses Nor Hanizah Binti Abdul Gapal, Aidalina Binti Mahmud, Aniza Binti Ismail	12.10-12.15
D2S2-R4-PP27	Cognitive Impairment in Chronic Kidney Disease: Prevalence and Contributing Factors – Preliminary Findings Hii Ching Ching, Aznida Firzah Abdul Aziz, Mohd Fairuz Ali, Teh Rohaila Jamil, Muhammad Yusuf Bin Abu Shamsi	12.17-12.22
D2S2-R4-PP29	Strengthening Hospital Workforce Resilience through a One Health Lens: Evidence-Based Pathways for Sustainable Human Resource Policy in Private Healthcare	12.24-12.29

	Nita Kristiani, Maria Silvia Merry	
D2S2-R4-PP30	Advancing Sustainable Dental Practices: A Call for Green Dentistry Integration in Indonesia's Healthcare System Felicia Christie	12.31-12.36
D2S2-R4-PP31	Barriers and Facilitators to Wellness-Oriented Sports Health Program Implementation: Regulatory and Implementer Perspectives in Rural-Urban Sleman, Indonesia (Local Regulation No. 5/2019) Diana Fitri Milenia, Laksono Trisnantoro, Mirza Hapsari Sakti Titis Penggalih	12.38-12.43
D2S2-R4-PP34	Global Warming and Diabetes Mellitus in Indonesia Annisa Firdaus Winta Damarsya, Annisa Nuur Balqis	12.45-12.50

Sustainable Financing

D2S2-R5-PP36	Maintaining Sustainability: An Evaluation Of Budgeting In The Dengue Control Program Following The Implementation Of Wolbachia Technology Dewi Nurlita	12.10-12.15
D2S2-R5-PP37	Paid by the Patient; The Unseen Costs of Care under JKN in Indonesia Zsa Zsa Zeiss	12.17-12.22
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The background of the page is a faded, artistic illustration of a park scene. In the foreground, there are green trees and foliage. In the middle ground, a large, multi-story building with a central tower and many windows is visible. The sky is light blue with soft, white clouds. The overall tone is bright and airy.

PRESENTERS' ABSTRACTS

ORAL PRESENTATION DAY 1 : 17TH JUNE 2025 (TUESDAY)

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R1-OP41

Trapped in the Menu: How the Rigidity of BOK Funding Limits Health Program Planning Based on Local Needs at the Puskesmas in Baubau City?

Candra Candra^{1,2}, Mubasysyir Hasanbasri³

Center for Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia.

Associate Degree in Nursing, Al-Islam College of Health Sciences Yogyakarta, Indonesia.

Department of Biostatistics, Epidemiology, and Population Health, Universitas Gadjah Mada, Yogyakarta, Indonesia

candra.chpm@gmail.com

Abstract

This study aimed to investigate how the structural rigidity of Health Operational Assistance (BOK) funding impacts the ability of Puskesmas in Baubau City to develop and implement health programs tailored to specific local needs. A qualitative case study approach was employed, focusing on three Puskesmas: Wajo, Katobengke, and Liabuku in Baubau City, Indonesia. Data were collected through in-depth interviews with 12 key informants, including Puskesmas managers and health workers involved in BOK fund planning and management. Thematic analysis was used to identify patterns in the interview data. Findings were validated through source triangulation and member checking. Seven key themes emerged highlighting constraints from BOK funding rigidity: (1) dependency on central program menus, (2) limited/mismatched budget ceilings, (3) inflexible processes, (4) restrictions on human resource financing, (5) lack of local flexibility, (6) complex regulations with rigid cost standards, and (7) allocations not adequately reflecting specific regional characteristics. These limitations resulted in significant discrepancies between Puskesmas plans and received BOK funds, often leading to cuts, inability to fund local priority activities, and hindering effective responses to urgent local health issues. The study concludes that the current rigid structure of BOK funding significantly impedes context-responsive health program planning at the Puskesmas level in Baubau City, preventing optimal addressing of unique community health challenges. Findings underscore an urgent need for policy reform towards a more flexible, needs-based BOK model granting greater autonomy to Puskesmas.

Keywords: Health Funding, Program Planning, Local Needs

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R1-OP3

Cost-Effectiveness of Employee Assistance Programs (EAPs) for Mental Health Support Among Employees in Malaysian Workplaces

Diong GL¹ and Aljunid SM²

School of Business and Technology, IMU University

Department of Public Health and Community Medicine, School of Medicine, IMU University

alexldiong@gmail.com

Abstract

Employee Assistance Programs (EAPs) are workplace interventions designed to support employees' mental health and well-being. Despite their growing adoption in Malaysia, limited research evaluates their cost-effectiveness from an employer's perspective. This study aims to assess the direct and indirect costs of EAP implementation and its impact on employee mental health, work productivity, and overall cost-effectiveness using a health economic framework. This study employs a cross-sectional design comparing employees utilizing EAP services. Participants will be categorized into Full-Utilization (≥ 4 sessions) and Partial-Utilization (≤ 3 sessions) groups. This study looks at whether Employee Assistance Programs (EAPs) are a cost-effective way to support employees in Malaysian workplaces. To measure mental health outcomes, CORE-10 will be used, while the EQ-5D-5L will help assess overall health-related quality of life (HRQoL) and to calculate Quality-Adjusted Life Years (QALYs). Workplace productivity will be evaluated using the Health and Work Performance Questionnaire (HPQ), which tracks absenteeism and presenteeism. The cost analysis covers both direct costs and indirect costs. To determine the cost per QALY gained, Incremental Cost-Effectiveness Ratio (ICER) will be calculated, with sensitivity analysis ensuring the reliability of the findings. It is anticipated that Full-Utilization group employees will exhibit greater improvements in mental health, HRQoL, and productivity compared to Partial-Utilization employees. The ICER is expected to demonstrate that EAPs are a cost-effective intervention in Malaysian workplaces. This study will provide empirical evidence on the cost-effectiveness of EAPs, supporting data-driven decision-making for employers considering workplace mental health investments. The findings may influence policy recommendations for integrating EAPs as a standard workplace benefit in Malaysia.

Keywords : Employee Assistance Programs, Cost-Effectiveness, Mental Health

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

DISI-R1-OP65

Strengthening Hospital Resilience: The Role of Manager on Duty in Optimizing Patient Management under Indonesia's BPJS Scheme

Suwandhi^{1,2}, Ayyub²

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University

²Siti Khodijah General Hospital, Pekalongan

suwandhi71193@gmail.com

Abstract

The implementation of the National Health Insurance system (BPJS) in Indonesia imposes substantial challenges on healthcare institutions, demanding innovations to balance service efficiency, financial sustainability, and patient safety. This study aims to evaluate the effect of instituting a Manager on Duty (MOD) system at Siti Khodijah Hospital Pekalongan on operational effectiveness and clinical governance. Employing a mixed-methods design, quantitative data on service performance indicators were retrospectively analyzed, complemented by qualitative insights from semi-structured interviews with healthcare providers and managerial staff. The introduction of the MOD system, characterized by delegated vertical and horizontal decision-making authority, facilitated more integrated service delivery, optimized resource allocation, and strengthened clinical oversight. Observations indicated a marked improvement in patient flow management, expedited resolution of service bottlenecks, and enhanced support for physicians' decision-making processes. Importantly, these advancements were achieved without compromising established patient safety standards. The findings underscore the critical role of adaptive leadership models in enhancing hospital resilience and system integration, particularly within resource-constrained, insurance-based healthcare environments. This study offers empirical evidence supporting the strategic deployment of managerial interventions to bolster health system performance under universal health coverage mandates.

Keywords: Manager on Duty, Health System Resilience, Hospital Operational Efficiency

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

DISI-R1-OP66

Health Operational Assistance Fund: Decision Space, Institutional Capabilities, and Accountability in Indonesian Primary Health Centers

Muhamad Faozi Kurniawan, Bondan Wicaksono Adhi, Ika Septiana Eryani, Andreasta Meliala, and Mubasysyir Hasanbasri

Departement of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

muhamadfaozikurniawan2579@mail.ugm.ac.id

Abstract

Long-term projections indicate that public health expenditures will increase to double the average growth in government-income nations. Indonesia prioritizes the development of health services toward UHC, emphasizing the strengthening of primary health care services through promotional and preventive measures with allocated health operational assistance funds. This study explores Health Operational Assistance Fund obstacles to improving access and quality public health services. This study employs a mixed-methods approach, utilising the implementation research method. We collaborated and grouped 15 regions into three categories: high, middle, and low areas, to gather both secondary and primary data. The secondary data compiled from 2019 to 2023 includes budget and realization, and minimum service standard coverage in maternal and child health. We conducted interviews and small focus group discussions with fund managers in PHC and the district health office. We found that primary health centers follow the central government regulations to plan, implement, report, and evaluate assistance funds. Results of secondary data indicate that the low area, which has the high fiscal capacity, absorbs more of the district budget than the assistance fund but achieves lower minimum service standards in PHC than in the other area. The condition is due to the low human resources and unmatched activities in the menu guidelines. The PHC study only showed 7% disbursement of funds in phase 1, and 43% had over 90% fund absorption in phase 1. We also found delays in fund disbursement, reporting of fund accountability, a limited number of fund managers, rarely conducted fund manager training, and double input for reporting. Operational health assistance funds from the central government help the PHC implement programs. In practice, the programs and activities designed by the central government have not met local needs to improve access and quality of public health services.

Keywords: Assistance fund, promotive and preventive, absorption

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R1-OP6

Game-based circuit exercise enhances function, self efficacy and quality of life of stroke survivors: A randomized controlled trial

Mohd Naquiuddin Johar¹, Nor Azlin Mohd Nordin¹, Aznida Firzah Abdul Aziz²

Center for Rehabilitation and Special Needs Studies, Faculty of Health Sciences, Universiti Kebangsaan Malaysia

Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia

p108690@siswa.ukm.edu.my

Abstract

Game-based circuit exercise was believed could enhance engagement and outcomes compared to conventional approaches. This study merged the 'usual circuit exercise' and enriched environment of training to evaluate the effects of game-based circuit exercise compared to conventional circuit exercise on aerobic endurance, self-efficacy and quality of life of stroke survivors. This study also assessed whether the effects could be sustained at 3 and 6-month post-trial. This randomized controlled trial involved 88 stroke survivors assigned to either a game-based circuit exercise using Checkercise® board (n = 44) or conventional circuit exercise (n = 44), conducted for 45 minutes twice weekly over 12 weeks. Outcomes were assessed using the 6-Minute Walk Test (6mWT), Stroke Self-Efficacy Questionnaire (SSEQ) and Short Form-36 (SF-36). Data were analysed involving 88 subacute stroke survivors (mean age \pm standard deviation = 57.1 \pm 10.8 years; 75% were male, 75% ischemic stroke, mean Montreal Cognitive Assessment score = 26.4 \pm 3.4). Results showed significant; 1) interaction effect ($p < 0.05$) with a small effect size (0.01 to 0.03) for physical and mental scores of SF-36, 2) group effect ($p < 0.05$) with a small effect size (0.04) for the 6mWT and 3) time effect ($p < 0.05$) with medium to large effect sizes (0.42) for SSEQ. Sustained improvements in 6mWT performance and SF-36 physical component scores were observed exclusively in the experimental group at 3 and 6-month follow-ups. The improvements observed in the SSEQ were also maintained at 6-month in both experimental and control group.

Keywords: stroke, self efficacy, quality of life

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

DISI-R1-OP78

Strengthening Health Insurance Sustainability through Cross-Sector Contribution Collection Efforts: A Case Study at BPJS Kesehatan Main Branch Manado

Andry Budiarjo¹, Diah Ayu Puspandari²

¹Master Student of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Indonesia

²Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Indonesia

andrybudiarjo1988@mail.ugm.ac.id

Abstract

Strengthening the financial sustainability of Indonesia's National Health Insurance (JKN) program requires innovative and collaborative contribution collection efforts. In Indonesia, the transition of independent non-wage earners (PBPU) with contribution arrears into the wage earner (PPU) segment, particularly within business entities, presents unique challenges for financial sustainability. Recognizing the limitations of conventional collection mechanisms, BPJS Kesehatan Main Branch Manado initiated an innovative cross-sector partnership program involving employers and local governments to enhance contribution recovery efforts. This study aims to evaluate the implementation processes, challenges, and anticipated outcomes of these contribution collection initiatives. An exploratory qualitative case study approach will be employed, involving in-depth interviews with BPJS Kesehatan officers, employers, local government representatives, and transitioned participants, followed by thematic analysis using the Miles and Huberman framework. The expected findings are to identify how integrating Corporate Social Responsibility (CSR) initiatives and formal government support can optimize contribution collection strategies, increase participant engagement, strengthen financial resilience, and inform policy recommendations for institutionalizing public-private collaboration models to reinforce the sustainability of the national health insurance program.

Keywords: Premium collection, PBPU arrears, PPU business transition, CSR initiatives, Health insurance sustainability

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R2-OP8

Variations in Self-reported Hand Hygiene Behavior by Socioeconomic Status among Residents of Korail Slum, Dhaka, Bangladesh

Md Mostafizur Rahman^{1,2*}, Wit Wichaidt¹

Department of Epidemiology, Faculty of Medicine, Prince of Songkla University, Hat Yai, Thailand
Eminence Associates for Social Development, Dhaka, Bangladesh

tushar@eminence-bd.org

Abstract

Although Bangladesh's GDP per capita has tripled in 15 years, challenges in hand hygiene facility access and practice remain among slum residents. Furthermore, the extent to which hand hygiene behaviors vary by socioeconomic status in this vulnerable population remains largely unexplored. Such findings can provide basic information for relevant stakeholders. The objective of this study was to describe variations in hand hygiene behaviors among residents of Korail Slum, Dhaka, across socioeconomic status (SES) levels. We conducted a cross-sectional study and collected data from 404 adult residents of Korail Slum using face-to-face interviews. We selected our participants using systematic random sampling and collected data by structured interviews. We asked our participants to self-report their education, income, asset ownership, and hand hygiene behaviors at various events. We used principal component analysis (PCA) to rank the participants into SES tertiles. We then used descriptive statistics to describe and present our study findings. Approximately 17 percent of the participants reported always washing their hands with soap after going to the toilet. However, participants from the second tertile of wealth were twice as likely to report always washing hands with soap than participants from the first tertile after adjusting for age and sex (19% vs. 9%, Adjusted OR = 2.37, 95% CI = 1.14, 4.93), and participants from the third tertile of wealth nearly three times more likely (22% vs. 9%, Adjusted OR = 2.79, 95% CI = 1.35, 5.75). Similar differences were also found for self-reported handwashing at other events. Limitations regarding social desirability bias and the lack of generalizability should be considered as caveats in the interpretation of the study findings. Future studies should further explore the mechanism behind the disparities and find tailored solutions to narrow socioeconomic disparities in hand hygiene behaviors.

Keywords: Hand hygiene, socioeconomic status, disparities

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R2-OP11

Effectiveness of the Community Chronic Kidney Prevention Model for delaying chronic kidney disease progression

Wisansak W.¹, Banchuin C.², Potisat P.², Lekagul S.², Leesmidt V.²
Saithongwattana Hospital, Kamphaeng Phet Province, Thailand
Bhumirajanagarindra Kidney Institute, Bangkok, Thailand.
vinailsmdt@gmail.com

Abstract

The Community Chronic Kidney Prevention (CCKP) Model was developed to delay the progression of stage 1, 2 and 3a chronic kidney diseases (CKD). The objective of this study was to assess the effectiveness of the CCKP model. Both quantitative and qualitative studies of the mixed method were used. Quantitatively, the quasi-experimental design with experimental and control groups was conducted, 300 samples in each arm. The study started from October 2023 to September 2024 recruiting 307 experimental and 203 comparison cases. The experimental group was provided with three important interventions including active CKD screening, CKD clinical services with home visits and community participation, while the comparison received routine outpatient medical services. In CKD clinic, the experimental group received CKD prevention care provided by multidisciplinary health team (MDCT) including a family doctor, a nurse, a physiotherapist, a pharmacist and a nutritionist. During attending CKD clinic, the experimental CKD patients received medical services and health education concerning the progression of the CKD, nutrition, drugs and toxicity, exercise and risk factors such as tobacco and alcohol abuses. The home visit was performed by MDCT and village health volunteers (VHVs). The VHVs used salt and sweetness-meters to monthly monitor food sodium and sugar consumptions. For community participation, the community-based District Quality of Life Development Committee (DQLDC) led by the district governor and related stakeholders such as local government mayors and other community representatives were set up to manage the CKD prevention policy in each district. Outcomes of concern were health behavior changes and renal function tests. Before and after health behaviors were collected from observation and interview by the VHV by using validated questionnaires. The behaviors changes focused on daily salty, sweet and fatty food intakes, appropriate drug use particularly Non-Steroidal Anti-inflammatory Drugs (NSAIDs) and local herbal medicines, sufficient exercise and alcohol and tobacco abuses. Renal function test concentrated on urine microalbumin creatinine ratio as well as the microalbuminuria. The real test of renal functions was collected and analyzed quarterly. The descriptive statistics and paired T-test were used with p-value <0.05 as significant level. The qualitative data was collected by focus group discussion with the patients and MDCT, in-depth interview of the DQLDC, field observation on CKD clinic performance and documentary reviews about the CKD prevention projects and meeting reports. The data was analyzed by using the content analysis technique. The analysis showed that the experimental group achieved a 33.1% (p=0.05) reduction in the mean urine microalbumin, a 14.9% (p=0.00) reduction in diet sodium and food sweetness decreased 66.9% (p=0.00). But, for the control group, the urine microalbumin slightly increased 0.3% (p=0.99), diet sodium increased 4.2% (p=0.29) and the food sweetness markedly increased 48.1% (p=0.00). About behavioral changes, there were several significant improvements in the experimental group including the decreases of NSAIDs utilization 31.93%, herbal self-treatment 23.53%, fat intake 6.87% and increase of patients' exercise 5.65%. Multivariate analysis revealed that health behavior was the only factor influencing the reduction of albuminuria (p<0.05). Qualitative analysis found that the DQLDC of experimental district played major roles in public policy driving and health financing mobilizer. The DQLDC played a significant role in building friendly circumstances encouraging CKD prevention such as promoting low sugar drinking menus, subsidizing more budget for community exercise equipment. The study pointed out that health behavioral was an important predictive factor for reduction the patients' albuminuria while the community participation was an important social factor for community CKD prevention.

Keywords: Chronic kidney disease, Prevention, Community participation

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R2-OP48

Implementation of Mental Health Program for Managing People with Mental Disorders (ODGJ) Based on Community Engagement at Lembeyan Health Center Area : A Case Study

Fadliana Hidayatu Rizky Uswatun Hasanah, Mubasysyir Hasanbasri, Lusha Ayu Astari
Department Health Policy Management, Faculty of Medicine, Public Health, and Nursing
Universitas Gadjah Mada, Yogyakarta, Indonesia
fadlianahidayaturizk@mail.ugm.ac.id

Abstract

Handling people with mental disorders (ODGJ) requires an approach that actively involves the community in every stage of program planning, implementation, and evaluation. Community engagement plays an important role in creating social support and a conducive environment to support the recovery of ODGJ. In this context, community engagement also supports the achievement of Universal Health Coverage (UHC), by ensuring that mental health services are equally accessible to all levels of society. This study aims to analyze the implementation of community engagement based on the Level of Community Engagement model and identify factors that influence the level of community involvement in the treatment of ODGJ in the working area of UPTD Puskesmas Lembeyan. This research uses a qualitative method with a case study approach. Data will be obtained through in-depth interviews, document review, and direct observation. The 12 informants were selected using purposive sampling technique. Data were analyzed using the Miles and Huberman (2014) analysis model with the help of atlas.ti software. This research is still ongoing until the end of June 2025. The preliminary findings show that the UPTD Puskesmas Lembeyan, the Village Government, and the Community have carried out management by providing treatment and services for People with Mental Disorders (ODGJ) who are neglected, homeless, threatening the safety of themselves and/or others, and disturbing public order and/or security. However, the implementation has not been optimal due to external constraints, especially the lack of support from the District Government, the Health Office, and the Magetan District Social Office, which play an important role in strengthening the mental health service system at the regional level.

Keywords: Community engagement, People with Mental Disorders (ODGJ), Mental Health Services

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R2-OP12

The role of housing conditions in the development of tuberculosis (TB) among individuals exposed to a TB patient in the home and residing in Padang, West Sumatra Province, Indonesia

Ringga Rahmi Prima¹, Alan Frederick Geater¹

¹ Department of Epidemiology, Prince of Songkhla University, Songkhla Province, Thailand

Corresponding author: Ringga Rahmi Prima

ringgarahmi@gmail.com

Abstract

Indonesia contributes 8.5% of global TB cases, with a case detection rate of 74.7%, below the 90% target. Housing conditions, particularly ventilation and overcrowding, are recognized risk factors for TB transmission. This study examines the association between housing characteristics and indoor air quality and TB status among individuals who had been exposed to a TB patient in their household in Padang, West Sumatra. A case-control study was conducted in six primary health centres in Padang from August to December 2024, involving 105 newly diagnosed TB cases (CS), 105 symptomatic but TB-negative controls (CN1), and 106 asymptomatic controls (CN2). Associations with TB status were analysed using multinomial and proportional odds logistic regression. Comparing cases to control 1 and control 2 respectively, bedroom volume <12m³ showed a relative probability ratio (RPR) of 2.27 [1.67, 4.41] (p=.016) and 3.79 [1.79, 8.01] (p=.001). Similar associations were seen for bedroom volume per person <10m³: 2.17 [1.13, 4.12] (p=.018), and 2.34 [1.22, 4.49] (p=.010). Having no bedroom windows or rarely opening them revealed RPR of 1.38 [0.79, 2.42] (p=.256), and 2.22 [1.23, 4.00] (p=.008), respectively; proportional odds ratio (pOR) across CN2, CN1 and CS was 1.80 [1.17, 2.78] (p=.008). In similar comparisons using living room volume per person <2.3m³, the RPR values were 1.57 [0.87, 2.84] (p=.135) and 2.85 [1.48, 5.49] (p=.002), with a pOR of 2.15 [1.34, 3.45] (p=.001). Overall, poor ventilation and small room volume, especially in bedrooms, may facilitate TB transmission. Improving ventilation and increasing bedroom space per person could reduce TB risk. Further research should account for potential confounders such as socioeconomic status.

Keywords: tuberculosis, housing condition, ventilation, overcrowding

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R2-OP13

Policy Recommendations on Strengthening Nursing Leadership: A Scoping Review

Masilawati Md Asim¹, Aniza Ismail², Noor Azimah Muhammad³, Zainah Mohamed⁴
 Department. of Public Health Medicine, Faculty of Medicine, National University of Malaysia, Kuala Lumpur, Malaysia
 Department. of Family Medicine, Faculty of Medicine, National University of Malaysia, Kuala Lumpur, Malaysia
 Department. of Nursing, Faculty of Medicine, National University of Malaysia, Kuala Lumpur, Malaysia
 masilawati.mdasim@hctm.ukm.edu.my,¹aniza@hctm.ukm.edu.my,²drazimah@hctm.ukm.edu.my,³zaizan@hctm.ukm.edu.my,⁴

Abstract

The global healthcare workforce is facing critical challenges, including nurse shortages, high turnover rates, burnout, and inadequate leadership support. While nurse leaders play a vital role in addressing these challenges, yet many lack structured leadership training and development opportunities. Strengthening nursing leadership is essential for ensuring workforce sustainability, improving patient care, and enhancing health system resilience. This review explores key leadership competencies, identifies barriers and facilitators, and proposes evidence-based strategies to develop effective nurse leaders. Therefore the aim of this paper is to analyze essential nursing leadership competencies required to address workforce challenges. This study employs a scoping review methodology to analyze leadership competencies, barriers, facilitators and policy-driven solutions. Scoping review was conducted using peer-reviewed literature from 2019 to 2024 (PubMed, CINAHL, Scopus). A total of 35 studies were selected based on relevance to nursing leadership, workforce challenges, and leadership development strategies. Through thematic analysis was applied to identify key trends, challenges, and best practices. The review identified four essential leadership competencies for nurse leaders: strategic decision-making, emotional intelligence, adaptive leadership, and mentorship. However significant barriers including limited leadership training, hierarchical workplace culture, and workload constraints impede leadership development. Policy recommendations include standardizing leadership frameworks, mentorship networks, and policy-driven initiatives supporting leadership development. The review recommends integrating leadership training into nursing curricula, establishing mentorship programs, and developing hospital policies that foster leadership growth. Addressing workforce challenges requires a paradigm shift in nursing leadership development. Hospitals and policymakers must invest in leadership training, implement competency-based leadership models, and create a supportive environment for nurse leaders. By strengthening leadership capacity, we can improve workforce retention, job satisfaction, and ultimately, healthcare system resilience.

Keywords: Nursing leadership, workforce sustainability, health system resilience

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R6-OP39

Strategies to Improve Retention and Coverage in Indonesia using Global Best Practices on Health Workforce Deployment: A Scoping Review

Ayuningtyas, Dumilah¹, Effendy Ferry², Putri, Likke P.³, Hendarwan, Harimat⁴, Okmianti, Puput¹, Despitasi, Mieska⁴, Zakiah⁵, Josi, Maria Intan⁵, Ningrum, Dwi Asih K.^{3,5}

¹ Fakultas Kesehatan Masyarakat, Universitas Indonesia

² Fakultas Keperawatan, Universitas Airlangga

³ Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan, Universitas Gadjah Mada

⁴ Badan Riset dan Inovasi Nasional

⁵ Kementerian Kesehatan RI

⁶ World Health Organization, Indonesia

dwasihkartikaningrum@mail.ugm.ac.id

Abstract

Inequitable distribution of the health workforce remains a persistent global challenge, disproportionately affecting rural and remote regions. Indonesia exemplifies this disparity, with over 50% of health workers concentrated in Java. Despite multiple national initiatives, including bonded scholarships, special assignments, and fiscal incentives, structural and implementation barriers continue to impede equitable deployment. This study aims to benchmark international strategies for addressing geographic imbalances in health workforce distribution and identify adaptable policy insights for the Indonesian context. A scoping review was conducted following the PRISMA-ScR guidelines. Literature published in the last ten years was sourced from nine global databases, including PubMed, Scopus, and Web of Science. A total of 6,760 records were identified, and 117 studies from 33 countries were included after rigorous screening and eligibility assessment with Covidence. Extracted data were synthesized thematically to map key policy modalities related to recruitment, education, deployment, incentives, and retention. The findings reveal diverse, context-specific strategies, with successful programs demonstrating integrated, multi-sectoral approaches. These include rural-oriented medical education, mandatory service post-scholarship, decentralization of health workforce planning, substantial rural retention incentives, and support for dual-career couples. Notable examples include Australia's bonded scholarships, China's regional hospital autonomy, and the Philippines' community-embedded internship programs. To bridge the gap between policy design and implementation, Indonesia must align local governance structures, education reforms, and fiscal incentives through a bundling intervention strategy. This includes curriculum adaptation for rural relevance, targeted scholarship allocation, reinforced district-level planning, and a robust legal framework to govern post-service obligations. Global evidence underscores the necessity of systemic coherence, stakeholder alignment, and long-term commitment to sustain workforce availability in underserved areas.

Keywords: Distribution, health workforce, global benchmarking

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
DIST-R3-OP53

Integrating Patient-Centered Design in Digital Health : A Protocol for Developing Self Management Application in Adult CHD Patients

Resia Perwirani¹, Lucia Kris Dinarti, Lutfan Lazuardi²

^{1,2,3} Gadjah Mada University

resiaperwirani@mail.ugm.ac.id

Abstract

Increasing life expectancy of individuals with Congenital Heart Disease (CHD) led to a growing population of adult patients who require lifelong care. Managing chronic cardiac conditions in Indonesia poses challenges, including inadequate ongoing health monitoring and low patient engagement in self management. These issues highlight the urgent need for digital health solutions tailored to support self-management in adult CHD patients. This research protocol is intended to answer the research question 'How to build a self management application (SMA) for adult patients with CHD grounded in Patient-Centered Design (PCD)?'. This research has specific objectives; to understand self-management needs of CHD patients that can be addressed through a digital application, design prototype, implement and evaluate tailored SMA. Researchers purposely recruited participants from the Indonesian Pulmonary Hypertension Foundation, and clinicians of Cardiac Center at Dr. Sardjito Hospital which serves as a national tertiary referral center for CHD. Using action research methodology, the study protocol involves two iterative cycles. In Cycle 1, data will be collected through FGD to identify the user's needs. The results will be used to develop a prototype, which will then be evaluated using the System Usability Scale questionnaire. In Cycle 2, SMA will be developed and implemented over a period of at least three months, followed by evaluation using a validated TA-PAR questionnaire. TA-PAR is a theoretical model proposed by researchers, derived from the integration of Technology Acceptance Theory and Participatory Action Research. It provides a holistic model to better understand factors that influence technology acceptance in participatory research settings that are validated through content validity, reliability, and pilot test. This study is envisioned to contribute not only to the creation of a viable application for adult CHD self-management but also to the broader field of digital health innovation by demonstrating the value of PCD in improving both system adoption and health outcomes.

Keywords: Congenital Heart Disease, Self Management Application, Patient-Centered Design

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
D1S1-R3-OP17

Development, Feasibility and Economic Evaluation of Teleconsultation Care Pathway for Older Patients with Noncommunicable Diseases

Mya Win Hnit¹, Aznida Firzah Abdul Aziz¹, Chai-Eng Tan¹, Mohd Fairuz Bin Ali¹
Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia
p146849@siswa.ukm.edu.my

Abstract

Teleconsultation can address the current needs and challenges in the care of older patients with noncommunicable diseases (NCDs). Local guidelines for general teleconsultation services do not address issues related to older patients. The aim of this study is to design and develop a teleconsultation care pathway for older patients with NCDs (TeleCOOP-NCD™) in the Malaysian primary care setting and to evaluate its feasibility and cost-effectiveness. This is a design and development study with two main phases. Phase 1 involves the design and development of the TeleCOOP-NCD™ via an initial needs assessment via literature review, brainstorming sessions with nurses, administrative staff and selected patients/caregivers. The TeleCOOP-NCD™ will be designed as a care pathway to guide primary care teams to manage older patients with NCDs optimally at community level. Focused group discussions will be conducted with an expert panel to evaluate the TeleCOOP-NCD™ prior to implementation in public primary care setting. Phase 2 is quasi-experimental study comparing an intervention arm and a control arm, to evaluate the feasibility and cost-effectiveness of implementing the TeleCOOP-NCD™ at an academic primary care clinic in Kuala Lumpur. Older patients aged 60 years and above, who have internet access and know how to operate a smartphone/device or are able to receive assistance of its use, not frail, receiving treatment for NCDs, will be included in phase 2 study. Participants in the intervention arm will undergo the TeleCOOP-NCD™ pathway during the six-month study duration whereas the control group will receive the usual onsite care. Expected outcomes include the feasibility outcomes for the TeleCOOP-NCD™ (patient satisfaction, recruitment and retention rates), economic evaluation from societal perspective (ICER, QALY) and clinical outcomes of NCD conditions. We hypothesize that the use of TeleCOOP-NCD™ will be more cost-effective (lower total cost per QALY gained) compared to in-person visits for older patients with NCDs.

Keywords: Teleconsultation, geriatric care, noncommunicable diseases

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
DIST-R3-OP71

Data Quality and Influencing Factors of Medical Devices at Primary Health Care Centers in a Rural Area of Yogyakarta Special Region

Ina Amali Fauziah¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia.

ina.a.f@mail.ugm.ac.id

Abstract

Access to medical devices, particularly in rural areas, is essential for the delivery of quality health services. In Maternal and Child Health (MCH), the availability of appropriate medical devices supports early detection, safe delivery, and adequate postnatal care, especially in rural areas. To support equitable access to such equipment, the Indonesian Ministry of Health developed ASPAK (Aplikasi Sarana, Prasarana, dan Alat Kesehatan), a national health information system for monitoring infrastructure and medical devices. Ensuring that ASPAK provides reliable and representative information for decision-making requires high quality data that accurately reflect the actual conditions in healthcare facilities. This study assessed the quality of medical device data in ASPAK and explored the key factors influencing data quality in primary care settings. A mixed-methods case study was conducted involving 30 primary health care centers across Gunungkidul District, Yogyakarta Special Region, between January and March 2025. Quantitative analysis showed low overall data quality, with the highest score reaching 79%, just below the 80% threshold for fair quality. Qualitative findings identified data management as the most critical factor influencing data quality, particularly regarding data control processes, validation mechanisms, and update routines. To address these gaps, researchers recommend that primary health care facilities' managerial or district health offices implement regular capacity-building programs, establish clear accountability structures for data validation, and integrate ASPAK data monitoring into routine supervision. These measures are essential for improving utilization of ASPAK data output, enhancing system reliability, and strengthening maternal and child health service delivery in rural settings.

Keywords: Data Quality, Medical Device, Health Informatics

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
DIST-R3-OP19

Development of Rapid Response System for the Management and Prevention of Child Malnutrition at the Primary Care and Community Levels: A study protocol

Dzikri Fadhilah¹, Digna Niken Purwaningrum², Adi Utarini¹, Lutfan Lazuardi¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia, ²Department of Biostatistics, Epidemiology and Population Health, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

dzikrifadhilah@mail.ugm.ac.id

Abstract

Indonesia faces a triple burden of malnutrition, encompassing undernutrition, micronutrient deficiencies, and obesity. While nutritional monitoring has been digitized through the Electronic Community-Based Nutrition Recording and Reporting System, delays persist in follow-up care, and intensive monitoring of at-risk children remains inadequate. This study develops and evaluates a Rapid Response System (RRS) supported by mobile health (mHealth) to enhance healthcare access, monitoring, and behavioral interventions in feeding and parenting. Using a Participatory Action Research (PAR) combined with a mixed-method approach, the study comprises diagnosis, planning, implementation, and evaluation phases. The diagnosis phase identifies malnutrition challenges using focus group discussions (FGDs) and secondary data on at-risk and malnourished toddlers, as well as nutrition program outcomes. The planning phase involves establishing Standard Operating Procedures for the RRS and developing the mHealth tools. The implementation phase of RRS includes detecting malnourished and at-risk toddlers, followed by a comprehensive assessment and parenting education at Community Health Center (CHC) and 12 weeks of mHealth monitoring for diet, nutritional and health status, and caregiving challenges, with weekly telemedicine or in-person consultations concluding with an evaluation. The evaluation uses a mixed-method sequential explanatory design. A quasi-experimental study non-equivalent control group assesses the system's impact on nutrition, feeding practices, and parenting knowledge, followed by parent interviews, FGDs with providers to identify delivery challenges and quantitative result evaluation. The RRS targets children aged 0–60 months at the area of CHC Sentolo I, Kulon Progo District, who meet at least one malnutrition risk criterion: obesity, overweight, stunting, wasting, underweight, or weight faltering. The expected outcome is a person-centered RRS integrated within CHC, incorporating community-level screening, CHC-based management, and structured follow-up care. MHealth will facilitate continuous monitoring and follow-up for malnourished children and at-risk individuals identified at community screenings.

Keywords: Health Services Model, Community Engagement, Child Malnutrition

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
DIST-R3-OP21

Determinants of Wearable Health Monitoring Device Adoption: The Role of Health Beliefs and Technology Acceptance in Klang Valley

Goh Lay Khim, Chen Yie-Ling, IMU University
IMU University
GohLayKhim@imu.edu.my

Abstract

Background: Wearable Health Monitoring Devices (WHMDs), such as smartwatches with health tracking features, have become increasingly popular in personal health management. With the growing prevalence of chronic illnesses and an aging population, it is essential for the healthcare sector to harness technology to support disease management outside of traditional hospital settings. This study aimed to compare health beliefs and technology acceptance between WHMD users and non-users and explore factors influencing the transition from adoption intention to actual use among residents in Klang Valley, Malaysia. A quantitative comparative research design was employed, collecting 385 responses from individuals aged 20 to 60 through purposive sampling (1:1 ratio of users and non-users). Data were gathered using an online self-administered questionnaire and analyzed using SPSS. Open-ended responses were analyzed via content analysis. The findings revealed that health consciousness ($p = 0.019$), perceived usefulness ($p < 0.001$), and perceived ease of use ($p < 0.001$) were significantly higher among WHMD users. A positive relationship was observed between technology acceptance constructs and adoption intention ($p < 0.01$, $r = 0.408$). While health belief constructs did not directly influence adoption ($p > 0.05$), they strongly correlated with technology acceptance constructs ($p < 0.01$, $r = 0.883$), suggesting an indirect influence on adoption behavior. Content analysis identified additional factors affecting adoption, including commitment to health, experience quality, social influence, and resistance. The findings underscore the potential of WHMDs in preventive healthcare, such as monitoring physical fitness in obesity and diabetes patients, and tracking sleep for individuals with chronic pain. Continuous monitoring can enhance early intervention and treatment adherence. Policymakers should consider establishing national guidelines for WHMD usage mandates or incentives for chronic disease management, as well as promoting data interoperability with electronic health records to improve clinical integration.

Keywords: Adoption intention, Health Belief, Wearable Health Monitoring Device

Room 4 - U2.4A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

DISI-R4-OP59

Diurnal variation in distance, space, and location transition probability of free-roaming dogs in a co-existing area of local communities and tourists, Thailand

Thanidtha Te-Chaniyom^{1,2}, Kyaw Ko Ko Htet¹, Kittisakdi Choomalee³, Anuwat Wiratsudakul^{4,5}, Virasakdi Chongsuvivatwong^{1*}

¹ Department of Epidemiology, Faculty of Medicine, Prince of Songkla University, Hatyai, Songkhla, Thailand

² Faculty of Veterinary Science, Prince of Songkla University, Hatyai, Songkhla, Thailand
Sub-theme: Community-Centered Health and Health Workforce Promotion

¹ Department of Epidemiology, Faculty of Medicine, Prince of Songkla University, Hatyai, Songkhla, Thailand

³ Department of Family and Preventive Medicine, Faculty of Medicine, Prince of Songkla University, Songkhla, Thailand

⁴ The Monitoring and Surveillance Center for Zoonotic Diseases in Wildlife and Exotic Animals, Faculty of Veterinary Science, Mahidol University, Thailand

⁵ Department of Clinical Sciences and Public Health, Faculty of Veterinary Science, Mahidol University, Thailand

cvirasak@medicine.psu.ac.th

Abstract

Free-roaming dogs are common in middle- and low-income countries, including Southeast Asia. Unleashed and unowned dogs could play a key role in transmitting zoonotic diseases to humans, as they are familiar to us. The study aims to explore the roaming patterns of dogs on Lipe Island, considering their characteristics and temporal variations. From September to December 2024, a collar with a Catalog Gen 2 GPS device was attached to the dog's neck, tracking intervals every 15 minutes for 3 to 7 days. There were 25 records from 8 owned and 7 unowned dogs, with 10 dogs tracked in both low- and high-tourist seasons. A linear mixed model was conducted to determine predictors for distance per 15 minutes in R version 4.5.0. Of the total points tracked, three-quarters were identified in human habitats, 21.20% in forests, while the remainder were on beaches and in the sea. Interestingly, only 0.3% were found on the walking street, a well-known dining area. Dogs similarly existed in land types and locations regardless of the tourist season. However, the origin land type was a significant predictor for 15-minute distance, with beach origin sites being longer than forest sites. In contrast, human habitat origin sites predicted intermediate-distance movements. Although the study was limited by a short-term duration and a small sample size of tracked dogs, the results emphasized that the risk of dog-human encounters in tourist areas remains constant throughout the year. Therefore, authorities should strengthen vaccination efforts and public education in these locations during both low and high tourism seasons. Furthermore, proactive land management is essential for preventing and controlling potential outbreaks even in areas with no prior outbreaks.

Keywords: Roaming pattern, Tourist area, Linear mixed model

Room 4 - U2.4A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

DIS1-R4-OP24

Knowledge, attitudes, and practices on smoking cessation and prevention laws among patients in a tertiary hospital and community clinic outpatient clinics

Dy. Louie F.¹, Jabonillo, Krizzia Rae B.¹, Desabille-Deblois, Dena Mae Amor N.², Sumatra, Reina Juno U.³, Palileo-Villanueva, Lia Aileen M.^{1,4}

¹ Department of Medicine, University of the Philippines-Philippine General Hospital, Manila, Metro Manila, Philippines

² Department of Family and Community Medicine, University of the Philippines-Philippine General Hospital, Manila, Metro Manila, Philippines

³ Ateneo School of Government, Pacifico Ortiz Hall, Fr. Arrupe Road, Social Development Complex, Ateneo de Manila University Katipunan Avenue, Loyola Heights, Quezon City, Metro Manila, Philippines

⁴ College of Medicine, University of the Philippines Manila

lfdy@up.edu.ph

Abstract

Following the Sin Tax Reform Law of 2012 (Republic Act 10351) and Graphic Health Warning Law of 2014 (Republic Act 10643), smoking prevalence in the Philippines declined from 29.7% in 2009 to 19.5% in 2021. Among smokers, 68% attempted to quit due to rising cigarette prices, and 43.7% due to graphic warnings. However, only 3.9% successfully quit. This convergent mixed methods study assessed knowledge and attitudes towards smoking and related laws, and explored smoking practices and influencing factors. A total of 393 survey respondents and 30 in-depth interviewees participated - both from outpatient clinics of a tertiary level university hospital and a primary level urban health center. Among them are 249 (63%) never smokers, 60 (15%) former smokers, 59 (15%) quit attempts, and 25 (6%) persistent smokers. While most are knowledgeable on the adverse effects of smoking, 30% are unaware or unsure about the existence of these laws. While both excise taxes and graphic warnings help in smoking cessation and deterrence, addiction acts as a major barrier - causing one to ignore facts and graphic warnings. Two phenomena emerge: (1) demand inelasticity: to smoke persistently no matter how expensive cigarettes are, and (2) physiologic opportunity cost: to divert funds from essential needs such as rice (to which tobacco prices are often compared) in order to sustain smoking habits. Notably, having a family or community member suffering from a smoking-related illness significantly shaped the decision to avoid or quit smoking. We recommend multi-level strategies to more effectively address nicotine addiction - including individual and clinical interventions, family and community engagement (e.g., culturally adapted, church-partnered discussion groups), and system-wide improvements in cessation support. We recommend evaluating the effectiveness and utilization of multiple smoking cessation methods and programs, as well as investigating the role of vaping in contemporary tobacco use.

Keywords: smoking laws, sin tax, graphic warnings

Room 4 - U2.4A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

DISI-R4-OP62

A Latent Class Analysis of Student Eye Care Behavior: Evidence from 6–18-Years-Old in Indonesia

Muhammad Asroruddin*, W. Windarti, A. Fitriangga, L. Zulhidya, R.P Nugraha, S.Y. Elida

*Faculty of Medicine Universitas Tanjungpura

asroruddin@medical.untan.ac.id

Abstract

This study is aimed to identify the hidden patterns and the prevalence of eye care behaviors among Indonesian adolescents to inform targeted strategies for improving adolescent visual health. A cross-sectional survey was conducted among 895 students aged 6–18 years in Sambas, Ketapang, and Kapuas Hulu Districts, West Kalimantan, using multistage stratified cluster sampling. Data on eyecare practices, including screen time, reading duration, outdoor activity, and refractive error were collected via questionnaires and vision checkings. Latent Class Analysis (LCA) was applied to uncover behavioral subgroups. Model selection was guided by Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC), which balance model fit and complexity, and entropy to assess classification precision. Among the participants (61.8% female; mean age 13.62 ± 2.42), LCA identified three distinct behavioral classes. Class 1 Unhealthy behaviors, characterized by excessive handphone use (>6 hours/day), prolonged reading (3–6 hours/day), and minimal outdoor activity. This group had the highest prevalence of myopia and astigmatism ($p=0.3$). Class 2 Moderate behaviors, marked by mixed visual habits, more common in students aged 11–15 ($p=0.033$), females ($p=0.069$), and those in non-demonstration schools ($p<0.001$). Class 3 Healthy behaviors, involved balanced reading, low screen use, and frequent outdoor activity. Model fit indices supported the three-class solution (AIC: 4111.526; BIC: 4183.479; entropy: 0.3). Risk factors like handphone use >6 hours ($p=0.044$) and prolonged reading ($p=0.058$) were significantly associated with poor behaviors. Myopia prevalence was the highest in Kapuas Hulu (30.51%). This study highlights the need for behavior-specific school-based interventions, including screen time management, outdoor activity, and early vision screening in high-risk areas.

Keywords: eyecare behavior, latent class analysis, vision screening

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DISI-R4-OP27

Primary Care Doctors' Attitude Toward Patients with Mental Illness in Public Primary Healthcare Services in Kuching, Sarawak

Syed Mohd Taufiq Wan Obeng^{1,2}, Aznida Firzah Abdul Aziz¹, Mohd Fairuz Ali¹

¹ Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia

² Ministry of Health, Malaysia

p125961@siswa.ukm.edu.my

Abstract

Mental health disorders are on the rise in Malaysia, yet the country faces a shortage of psychiatrists, making primary care doctors the first point of contact for most patients with common mental illnesses. However, stigma surrounding mental health, including among healthcare professionals, remains a major barrier to effective care. In Malaysia, this research on stigma is particularly limited. Most of the published research is derived from Western and other countries that focused on public attitudes and perceptions toward mental illness and those with lived experience, but the research on the extent of stigma among healthcare providers, particularly primary care doctors, toward the same population is much less studied locally. Patient stigmatization is a significant problem in psychiatric care; thus, a reliable assessment of its level is essential in the context of effective medical interventions. This research proposal aims to assess stigmatizing attitudes among primary care doctors and their impact on mental health care. The objectives are: (1) to evaluate self-perceived attitudes toward patients with mental illness, (2) to assess attitudes using the Mental Illness Clinician's Attitudes Scale (MICA-4), and (3) to identify factors associated with stigma. A cross-sectional study will be conducted using universal sampling among 201 primary care doctors at public primary healthcare clinics in Kuching district. Data will be collected through a self-administered online questionnaire covering sociodemographic and professional characteristics, with MICA-4 scores indicating stigma levels. Findings from this study will inform targeted interventions, such as specialized training and anti-stigma programs, to improve mental healthcare in public primary care settings. (254 Words)

Keywords: mental illness, primary care, clinicians' attitudes scale

Room 4 - U2.4A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

DIS1-R4-OP22

Stakeholder Perspectives on Improving Access to Domiciliary Oral Care for Older Adults

Haslina Rani¹, In Meei Tew, Muhammad Syafiq Asyraf Rosli², Aznida Firzah Abdul Aziz³, Nur Saadah Mohamad Aun⁴, Siti Aisya Athirah Hassan⁵, Tuti Ningseh Mohd Dom⁶

^{1,3,6}Department of Family Oral Health, Faculty of Dentistry, Universiti Kebangsaan Malaysia, 50300 Kuala Lumpur, Malaysia

²Department of Restorative Dentistry, Faculty of Dentistry, Universiti Kebangsaan Malaysia, 50300 Kuala Lumpur, Malaysia

⁴Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia, 56000 Kuala Lumpur, Malaysia

⁵Centre for Research in Psychology and Human Well-Being, Universiti Kebangsaan Malaysia, 43600 Bangi, Malaysia

hr@ukm.edu.my

Abstract

As Malaysia's population ages, access to oral healthcare for older adults especially those who are frail, homebound, or living in institutions has become a pressing concern. Domiciliary oral care offers a potential solution by delivering services beyond conventional clinical settings. However, this model remains underutilized due to various challenges in policy, practice, and public awareness. This study explores the perspectives of key stakeholders involved in oral and general care of older adults, including general dental practitioners, special care dentists, dental public health specialists, prosthodontists, social workers, and family medicine specialists. Using a participatory approach, data were collected through a roundtable discussion, and a co-creation session where participants identified barriers and collaboratively developed feasible and impactful solutions. Data generated from the sessions was compiled using Microsoft Excel and qualitatively analysed. Thematic analysis revealed five key challenge categories: (1) policy and regulatory gaps, (2) patient and caregiver factors, (3) professional limitations, (4) resource constraints, and (5) low awareness. Proposed solutions included expanding existing guidelines to encompass all providers, training dental professionals in behaviour management and geriatric care, promoting interprofessional collaboration, and increasing public education through targeted campaigns. This study provides critical insights for improving domiciliary oral care in Malaysia. Its findings will inform the development of policies, training modules, and pilot programs to better serve the oral health needs of older adults in domiciliary settings.

Keyword: Stakeholder Perspectives, Oral Care, Older Adults

Room 5 - U2.4B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R5-OP29

Illicit Drugs Potential for Medical Use, Focus on Opioid : Student Perception Survey

Trowce Lista Nalle^{1,2} Nur Azzalia Kamaruzaman²

¹Department of Clinical Pharmacology, Faculty of Medicine Pelita Harapan University, Tangerang, Indonesia, ²National Poison Centre, Universiti Sains Malaysia, Penang Malaysia

trowcelista@gmail.com

Abstract

Indonesian government strict regulation mandates that doctors undergo complex procedures to prescribe opioid and report every use to the Minister of Health, according to Minister of Health Regulation No.3 of 2015 article 20. While opioids remain essential for pain management, their addictive potential has led to stringent regulations, occasionally restricting access for patients in need. This study explores medical students' perceptions regarding opioid use in medicine, focusing on their awareness, concerns, and attitudes toward opioid regulation. A survey was conducted via Google Forms, including both open- and closed-ended questions, among medical students who had completed courses in pain management, toxicology, and opioid intoxication. Data analysis was conducted using univariate descriptive. The study aimed to evaluate their understanding of opioid therapy, assess perspectives on balancing medical benefits with addiction risks, and gather insights on current opioid policies. Feedback from these future healthcare professionals is essential for addressing opioid-related challenges and improving patient care. Totally 160 of 256 (62%) students completed the survey. Of these, 70% were female, and the most common age was 21 years old (63%). The responses indicated that opioids play a crucial role in managing severe pain, particularly in post-surgical recovery, cancer treatment, and palliative care. However, concerns about misuse, addiction, and overdose were prevalent. While 68,1% agreed that opioid regulations should be stricter, 92,5% agreed clear indications for opioid use were necessary to avoid excessive governmental restrictions. These findings highlight knowledge gaps and a mix of support regarding opioid use in medicine and policy regulation.

Keywords: Opioids, student perceptions, policy regulation

Room 5 - U2.4B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R5-OP30

Optimising Strategic Purchasing for Pharmaceutical Procurement Services in the Malaysian Healthcare System

Wei Chern Ang^{1,2}, Aznida Firzah Abdul Aziz¹, Aniza Ismail³, Nurul Ain Mohd Tahir⁴, Syed Mohamed Aljunid Syed Junid⁵

¹ Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia

² Clinical Research Centre, Hospital Tuanku Fauziah, Ministry of Health Malaysia, Kangar, Malaysia

³ Public Health Department, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia

⁴ Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia

⁵ School of Medicine, International Medical University, Kuala Lumpur, Malaysia

p129572@siswa.ukm.edu.my

Abstract

Strategic purchasing plays a critical role in improving access to affordable, quality medicines. In Malaysia, pharmaceutical expenditure by the Ministry of Health reached RM3.193 billion in 2022, a 25.1% increase from 2021, highlighting critical financial concerns. Inefficiencies arising from fragmented procurement processes, a lack of formal negotiation beyond tenders and weak performance monitoring (relying informally on stock availability) pose significant challenges. The public sector often faces international reference prices two to three times higher than benchmarks, particularly for imported drugs. This study aims to develop evidence-based recommendations to enhance pharmaceutical strategic purchasing in the public healthcare sector. A multi-stage methodology will be applied, including (1) a PRISMA-ScR guided scoping review of 2016-2025 literature on international best practices in procurement strategies and performance monitoring (with emphasis on OECD and Asian countries with successful models); (2) a situational analysis that integrates policy, stakeholder and SWOT analyses of Malaysia's current regulatory frameworks, procurement mechanisms and systemic barriers; (3) quantitative surveys of institutional and state procurement officers from the Ministry of Health, Ministry of Higher Education and Ministry of Defence to assess current practices and challenges (e.g., barriers to strategic procurement and current performance monitoring practices); and (4) qualitative data collection through focus group discussions, Delphi rounds and a validation workshop involving policymakers and other key stakeholders. The expected outcome is a set of strategic recommendations encompassing guiding principles (e.g., transparency, value-based purchasing), key components (e.g., pooled procurement, outcome-based contracts), performance indicators (e.g., cost-effectiveness, medicine availability), and implementation strategies (e.g., centralised governance potentially through a dedicated strategic purchaser entity, digital procurement systems). The study hypothesises that integrated governance, strategic negotiation and technology adoption (including real-time data systems) will be key enablers of successful reform in pharmaceutical procurement practices in Malaysia.

Keywords: Pharmaceuticals, Health Policy, Pharmaceutical Services

Room 5 - U2.4B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R5-OP32

Cost-Effectiveness Study of Service and Mobile App Usage in Mentari and Outpatient Psychiatry Clinics in Malaysia

Adieza Farahain

Universiti Kebangsaan Malaysia

adiezafarahain@gmail.com

Abstract

Dr Adieza Farahain, Prof Dr Mohd Rizal bin Hj Abdul Manaf, Dr Faiz Daud, Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia. Mental healthcare systems globally strive to improve access to quality treatment and care for those in need. In Malaysia, substantial efforts and policies have been introduced to strengthen mental health services and expand community-based care. However, gaps remain due to the increasing economic burden of mental illness and the limited allocation of mental health funding. Malaysia allocates only 1.1% of its national health budget to mental health services despite the escalating economic burden of mental illness. Digital mental health interventions, including mobile applications, have emerged as effective solutions to bridge service gaps, improve accessibility, and reduce stigma. However, their cost-effectiveness within Malaysia's public healthcare context remains underexplored. Additionally, limited evidence exists on the economic value of community-based services which are also known as Mentari, which was launched in 2011. With limited financial resources and rising mental health needs, it is critical to assess the cost-effectiveness of existing services and digital interventions which significantly poses a challenge to sustainable mental healthcare provision. This study aims to assess the cost-effectiveness of the service and mobile app usage at Mentari and outpatient psychiatric clinics in Malaysia. A mixed-methods approach will be employed; qualitative methods to develop and validate the mobile app tailored for mental health users and followed by a quantitative analysis to assess the cost and effectiveness. Effectiveness outcomes will be measured using the Clinical Global Impression-Improvement (CGI-I) scale and the General Health Questionnaire-12 (GHQ-12). Cost-effectiveness will be determined using the Incremental Cost-Effectiveness Ratio (ICER). Findings from this study are expected to inform mental health policy, guide strategic resource allocation, and support the implementation of sustainable, evidence-based mental healthcare innovations aligned with Malaysia's Health Policy 2030 goals.

Keywords : Cost effectiveness analysis, mobile app, psychiatry

Room 5 - U2.4B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R5-OP82

Guessing the Opportunities for the Involvement of the Association of Southeast Asian Nations (ASEAN) as an Alternative Donor in Eradicating Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) in Indonesia

Tome, Ihsan Septian^{1*}

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

ihsanseptiantome@mail.ugm.ac.id

Abstract

Indonesia's efforts to eradicate Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) domestically in recent years have begun to show positive results, one of which is a decrease in the HIV incidence rate for every 100,000 uninfected population in 2022, which is 0.09% from the target of 0.19%. However, the freezing of the United States Agency for International Development (USAID) in early 2025 and the potential withdrawal of the United States from the Global Fund in the future are serious challenges in terms of funding HIV/AIDS programs in Indonesia, because based on data from the Ministry of Health in 2020, the combined percentage of these two sources reached 45.6%, forcing Indonesia to find replacement donors as soon as possible so that the effectiveness of the HIV/AIDS eradication program does not decrease. Therefore, the more active and dominant involvement of the Association of Southeast Asian Nations (ASEAN) is considered by researchers as an alternative, because of its potential as a new donor candidate, either by relying on its own financial capabilities or by involving other partners. This assessment is based on its track record in 2020 and 2022 where ASEAN managed to secure an aid package worth €350 million from the European Union (EU) and 5 million USD from the People's Republic of China (PRC) in the ASEAN-China Cooperation Fund (ACCF) scheme to handle the COVID-19 pandemic. This study aims to explore ASEAN's potential as a new donor in the HIV/AIDS program in Indonesia through a literature study using a literature study, followed by an analysis of official ASEAN documents with its member countries, especially those related to the development of HIV/AIDS and the political, social, economic and financial situations that follow. It is hoped that the results of this study can provide concrete policy recommendations regarding the cooperation mechanisms that can be adopted and effective health diplomacy strategies to ensure the sustainability of the HIV/AIDS program in Indonesia in the context of changes in global funding actors.

Keywords: HIV/AIDS Program; ASEAN; USAID

Room 5 - U2.4B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

DIS1-R5-OP101

The Relationship Between Primary Health Center Accreditation Status and Patient Satisfaction at the Gunung Sari Ulu Primary Health Center, Balikpapan in 2023

Nursakti¹, Ratno Adrianto^{2,1,2}

Public Health, Mulawarman University

cahayasakti.s3@gmail.com

Abstract

The accreditation status of the Health Center is an important indicator in ensuring the quality of health services that have a direct impact on patient satisfaction. This study aims to determine the relationship between the accreditation status of the Health Center and the level of patient satisfaction at the Gunung Sari Ulu Health Center, Balikpapan. This study used a quantitative design with an analytical survey method and a cross-sectional approach. The sampling technique used was purposive sampling with a sample size of 107 patients selected based on research criteria at the Gunung Sari Ulu Health Center, Balikpapan City. Data analysis was performed using the ChiSquare test. The results showed that the Gunung Sari Ulu Health Center obtained basic accreditation status in 2015 and full reaccreditation in 2023. Patient satisfaction was influenced by nine factors, where the Tangibles dimension had the lowest average in basic accreditation status, with 52 patients (48%) in the "Less Agree" category. In the plenary accreditation, the number of patients in the "Less Agree" category decreased to 34 people (31.8%), while 73 patients (68.2%) felt more satisfied. The results of the Chi-Square test showed a p value <0.05, which means there is a significant relationship between the health center accreditation status and the level of patient satisfaction. There is a significant relationship between the accreditation status of the Gunung Sari Ulu Health Center and the level of patient satisfaction based on an analysis of 107 respondents.

Keywords: Accreditation, Health Center, Patient Satisfaction

Room 5 - U2.4B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

DISI-R5-OP34

Cost-Effectiveness Analysis of Malaria Intervention Programmes: A Scoping Review

Misra Helma Firdaus¹, Dina Syazana Ho Imran¹, Sharifa Ezat Wan Puteh¹, Mohd Rizal Abdul Manaf^{*}

¹Department of Public Health Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia, Jalan Yaacob Latif, Bandar Tun Razak, 56000 Cheras Kuala Lumpur, Malaysia
mrizal@hctm.ukm.edu.my

Abstract

Malaria remains a major public health concern, especially in endemic areas with limited resources. Cost-effective interventions such as insecticide-treated nets (ITNs) or long-lasting insecticidal netting (LLINs) and indoor residual spraying (IRS) are crucial in reducing the disease burden. This review examines the economic evaluation of malaria control interventions in terms of cost-effectiveness. A scoping review was conducted using Scopus, Web of Science, and PubMed, resulting in 442 records identified through a predefined Population, Exposure, and Outcome (PEO) framework-based search strategy. The review focused on studies published between 2018 and 2024 examining the cost-effectiveness of malaria intervention programmes. The population consisted of communities in malaria-endemic regions, the exposure involved participation in intervention programmes, and the outcome assessed was the cost-effectiveness of these intervention strategies. Data extraction adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. Eighteen studies met the inclusion criteria, predominantly randomised clinical trials (RCTs) evaluating interventions like ITNs/LLINs, IRS, diagnosis, treatment, and combined strategies. Findings show single-method approaches, particularly LLINs and IRS, are cost-effective in resource-limited settings, providing significant health benefits, especially for vulnerable populations such as children and pregnant women. Combining interventions in areas with high resistance showed increased efficiency and improved outcomes without substantially escalating costs. However, complex, multi-faceted strategies sometimes did not yield proportional economic benefits, emphasising the importance of resource prioritisation. Cost-effective interventions like LLINs and IRS should be prioritised in resource-limited settings to maximise health impact. Combining strategies may benefit resistant areas, but economic evaluations are vital to balance cost and outcomes. Evidence-based resource allocation is key to sustainable malaria elimination, especially in vulnerable endemic populations.

Keywords: Human Malaria, Malaria Intervention Programmes, Cost-effectiveness analysis

Room 6 - R.201 IKM Building 2nd Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R6-OP83

Scoping Review of Surveillance system of Snakebite

Dewi Yuniasih^{1,2}, Adi Utarini¹, Lutfan Lazuardi²

¹Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

²Faculty of Medicine, Universitas Ahmad Dahlan, Yogyakarta, Indonesia

adiutarini@ugm.ac.id

Abstract

Envenomation due to snakebite is a significant but often overlooked public health issue, particularly in low- and middle-income countries. Reliable surveillance systems are essential for accurately estimating disease burden, planning antivenom distribution, and establishing effective prevention strategies. However, existing systems are often fragmented and do not reflect the true burden. This review aims to map and synthesize global evidence related to snakebite surveillance systems, evaluate their characteristics, identify implementation challenges, and analyse how surveillance data is used in public health decision-making, particularly in estimating antivenom needs. The review was conducted using the keywords "snakebite" and "surveillance system" in the PubMed and Scopus databases. Included articles were published up to 2023, written in English, had full text available, and used observational study designs, original research, or reviews. Out of 1,599 initial documents, after a rigorous screening process, 9 articles were included in the final analysis. The studies highlighted common challenges such as underreporting, limited access to healthcare facilities, and lack of integration of spatial and environmental data. Some countries have utilized GIS technology and statistical modelling to optimize reporting and antivenom distribution. Other studies emphasized the importance of involving traditional healers and community health workers to improve reporting in remote areas. These findings underscore the need for multisectoral collaboration and data harmonization across healthcare service levels. The conclusion highlights that snakebite surveillance systems in various countries remain inadequate. An integrated and contextualized approach is needed, involving community reporting, spatial-environmental data integration, and the development of comprehensive national databases. Strengthening these systems is crucial to ensure timely access to treatment and to reduce morbidity and mortality from snakebites.

Keywords: Surveillance system; Snakebite; Data integration

Room 6 - R.201 IKM Building 2nd Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R6-OP36

Beliefs, Attitudes, And Agreement With Treatment For Drug Abuse Amongst Final Year Medical Students In Imu University

Khairunniza Gharib¹, Siew Wei Fern²

¹Clinical Skills & Simulation Centre, IMU University, Malaysia

²Public Health & Community Medicine, IMU University, Malaysia

khairunnizagharib@gmail.com

Abstract

Drug abuse is a significant social problem and public health concern. A change in philosophy and direction to make drug abuse a medical problem is needed. It should start with medical students' positive change of mindset as they will be the future healthcare providers. Accurate information must be cascaded to communities to fill the great gap between scientific evidence and perception on drug abuse and addiction. This study is to determine the medical students' beliefs, attitudes, and agreement with treatment towards drug abuse. Their beliefs and attitudes may influence their perceptions of individuals with drug use disorders, ability to use specific intervention techniques, and likelihood of consenting to treatment strategies. Ninety-five out of 150 final year medical students were selected using G*Power calculator. The questionnaires consist of various items including demographics, attitude subscales, belief subscales, and agreement to treatment. Independent variable is agreeing that drug abusers deserve treatment. Dependent variables are disease and psychosocial model beliefs. Mean score for beliefs in disease model was 12.41 (SD: 4.23, 95% CI: 11.55, 13.25). Mean score for beliefs in the psychosocial model was 14.53 (SD: 2.91, 95% CI: 13.93, 15.12). Mean score for attitudes towards drug abuse was 18.92 (SD: 6.60, 95% CI: 17.57, 20.26). The indirect effect of disease and psychosocial model beliefs on the outcome of students agreeing to drug abusers deserving treatment through attitudes towards drug abusers was found significant [Effect = -0.058, 95% CI (-0.125 and -0.014)]. This study concluded that final year medical students in IMU University are not ready to be the change agent to promote drug abuse and addiction as a medical disease. Further exposures in clerking and observing drug abuse cases with additional clinical contact hours will help to build positive attitudes among these medical students.

Keywords: Substance use disorders, Substance abuse, Drug dependence

Room 6 - R.201 IKM Building 2nd Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R6-OP37

Attitudes and barriers affecting human papillomavirus vaccine uptake among Asian American women and their differences across ethnic subgroups: an evidence synthesis of available literature

Campbell M. Loi¹, Nisha Trivedi²

¹Brown University School of Public Health

²Brown University School of Public Health

campbell_loi@brown.edu

Abstract

Cervical cancer accounts for 12,000 cases and 4,000 deaths annually in the United States, with Human Papillomavirus (HPV) infections making up about 99% of all cases. Though vaccination can confer protection against the two most common types of HPV, uptake has remained low in the U.S., particularly among Asian American and Pacific Islander (AAPI) populations. The present study aims to synthesize current literature concerning barriers and facilitators to HPV vaccine uptake among young Asian American women and girls. The initial search yielded 33 unique articles after the removal of duplicates, with 23 and 28 appearing on PubMed and Embase, respectively. A total of 11 studies were selected for inclusion in the final analysis based on whether they focused explicitly on HPV vaccination, women and/or girls, barriers, and Asian Americans. Studies were excluded if they were not done in the U.S., were not published in English, or did not fit the aforementioned inclusion criteria. The majority of the selected studies focused on Korean Americans, making up six of the 11 papers. All studies concurred that HPV vaccination uptake and literacy were poor among AAPI populations compared to non-Latino white counterparts. However, AAPI women across all subgroups expressed willingness to take the HPV vaccine for themselves and their children when given the guidance and support to do so. Findings suggest that HPV vaccination uptake could be improved among AAPI women by leveraging community networks to promote HPV education and information sharing. The diversity of barriers and facilitators for each ethnic subgroup also highlights a need for more disaggregated research that explores the unique needs and contexts of each group in further depth. Future researchers must consider how traditions and norms may differ for AAPI compared to other racial groups as well as across ethnic groups within the broader AAPI label.

Keywords: Asian-American, human papillomavirus, vaccine hesitancy

Room 6 - R.201 IKM Building 2nd Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R6-OP38

Youthful but Vulnerable: Age Structure and Retention Risks in Indonesia's Health Workforce

Dwi Asih Kartika Ningrum
Universitas Gadjah Mada, Ministry of Health
dwasihkartikaningrum@mail.ugm.ac.id

Abstract

Indonesia's health workforce faces critical challenges not only in distribution and quantity but also in its age composition, which has profound implications for long-term sustainability and health system resilience. Analysis of the 2023 National Health Workforce Accounts (NHWA) data reveals that 45% of health workers are within the 25–34 year age group, reflecting a predominantly young workforce. However, there is a sharp decline in mid-career attrition significantly, particularly among nurses and midwives. Factors contributing to this trend include job dissatisfaction, limited career progression, high levels of burnout, and external employment opportunities. Moreover, gender dynamics exacerbate workforce instability, as women make up 76% of the health workforce and exhibit increasing attrition after age 45 due to family responsibilities and lack of supportive workplace policies. These demographic shifts pose serious risks to institutional knowledge continuity and leadership capacity, given the low proportion of senior professionals. If unaddressed, the health system could face future shortages as current younger cohorts advance in age amid persistent attrition. Policy responses must prioritize workforce retention, particularly in mid-career phases, and adopt gender-sensitive strategies to support women in the profession. Flexible working arrangements, structured mentorship, phased retirement, and equitable opportunities for career advancement are essential. Furthermore, incorporating age-disaggregated data into national planning processes is vital to anticipate gaps and guide targeted interventions. By addressing the age structure explicitly in health labor market policy, Indonesia can better align its workforce development with its demographic realities and the increasing demands of an aging population. Ensuring age balance, career sustainability, and gender equity is fundamental to achieving UHC and maintaining a resilient health workforce in the coming decades.

Keywords : Health workforce, age, gender

Room 6 - R.201 IKM Building 2nd Floor : Community-Centered Health and Health Workforce Promotion

DIS1-R6-OP40

Empowerment of Santri Husada as an Effort to Strengthen the Organization and Sustainability of the Health System in Islamic Boarding Schools

Machfud, Achmad Ali
Universitas Gadjah Mada
ali.machfud90@gmail.com

Abstract

Pesantren, as a vital component of Indonesia's educational landscape, face systemic health risks due to communal living arrangements and limited organizational capacity. This study explores strategies to empower pesantren communities in building sustainable health systems. Using a qualitative case study approach, the researcher analyzed policy documents, conducted stakeholder interviews, and assessed organizational practices in selected pesantren. The study identified essential inputs, including government policies and Poskestren programs, but found that internal health service management was often inconsistent. Outputs revealed limited training opportunities for internal health coordinators and a lack of standardized health operating procedures. Despite these organizational gaps, improvements in hygienic behavior among community members are anticipated. The study highlights the importance of empowering pesantren leadership and santri coordinators through targeted training, sustainable financing, and the establishment of formal health units within the pesantren structure. A key strategy proposed is the strengthening of an independent health organization model, where the Poskestren is managed by internal health personnel under the supervision of pesantren leaders. In this model, the community health center (Puskesmas) functions solely as a partner and quality control body, rather than a primary manager. Additionally, the research positions Santri Husada as agents of change by equipping them with adequate health knowledge and reinforcing their commitment, enabling them to serve as health promoters in their respective communities after graduation. Integrating health education into the pesantren curriculum and fostering partnerships with external health institutions are also identified as critical components for long-term system sustainability. The study concludes that empowering health organizations—particularly through the Santri Husada initiative—is essential in transforming pesantren from passive recipients into active drivers of community-based health promotion.

Keywords: Islamic Boarding School, Health System, Policy Analysis

ORAL PRESENTATION

DAY12 : 17TH JUNE 2025 (TUESDAY) - SESSION TWO

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS2-R1-OP2

Strengthening Resilient Integrated Health Systems through Sustainable Health Financing Policies: Addressing Financial Barriers to Respite Care Utilization among Informal Stroke Caregivers in Kedah, Malaysia

Ahmad Hazri Ilyas^{1,2}, Aznida Firzah Abdul Aziz¹, Mohd Fairuz Ali¹

¹Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia

²Ministry of Health, Malaysia

draznida@hctm.ukm.edu.my

Abstract:

Informal caregivers are integral to long-term care, particularly in resource-constrained health systems. However, caregiving responsibilities among stroke caregivers frequently entail substantial financial burdens, including direct out-of-pocket expenses, hidden caregiving costs, and indirect losses from reduced employment and income opportunities. Despite its recognized role in reducing caregiver burnout and delaying institutionalization, respite care remains underutilized primarily due to perceived high costs, limited availability, and cultural hesitance. Paradoxically, financial strain further restricts caregivers' access to respite care, exacerbating stress and negatively impacting caregiver resilience and health system sustainability. This exploratory qualitative study investigated informal stroke caregivers' perceptions of financial barriers influencing respite care utilization and the implications for health financing policy and universal health coverage in Kedah, Malaysia. Semi-structured, in-depth interviews were conducted with 18 informal stroke caregivers identified through purposive sampling from healthcare facilities. Interviews were recorded, transcribed verbatim, and analyzed thematically using Atlas.ti 25 software, guided by a structured codebook. Caregivers reported substantial financial challenges, including direct costs of respite services, hidden expenses related to caregiving, and significant loss of income due to reduced working hours or employment cessation. Many perceived formal respite care as prohibitively expensive, inaccessible, and inadequately subsidized, leading to low utilization despite acknowledged need. Cultural reservations and limited awareness of financial support mechanisms further exacerbated inequitable access. Caregivers recommended targeted government subsidies, incorporating respite care into existing health insurance schemes, tax relief measures, and innovative public-private partnership models to alleviate financial burdens. These findings underscore the necessity of explicitly integrating respite care services within the national universal health coverage framework. Effective health financing policies addressing caregivers' financial barriers can enhance equitable service access, prevent caregiver burnout, and promote resilience and sustainability within the broader healthcare system. (280 words)

Keywords : Respite care, Financial barriers, Health financing policy

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS2-R1-OP42

Patient Experience of an Integrated Primary Healthcare Model in Indonesia: a case of West Sumbawa District

Mentari Widiastuti^{1*}, Shita Listya Dewi¹, Sandra Olivia Frans^{1,2}, Siti Nurfadilah^{1,3}, Putri Listiani⁴, Rizki Tsalatshita Khair Mahardya⁴, Hermawati Setyaningsih⁴, Ery Setiawan⁵, Ulfathea Mulyadita⁵, Jefrianus Rouki⁵, Trihono⁵, Sulastri⁶, Maria Endang Sumiwi⁷, Mubasysyir Hasanbasri^{1,8}

¹Center for Health Policy and Management, Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada, Indonesia

²Nossal Institute of Global Health, University of Melbourne, Australia

³Public Health Program, Faculty of Public Health, Universitas Halu Oleo, Indonesia

⁴Center for Health Financing Policy and Health Insurance, Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada, Indonesia

⁵ThinkWell Institute, Indonesia

⁶West Sumbawa District Health Office, Indonesia

⁷Directorate General for Primary Care and Community Health, Ministry of Health, Indonesia

⁸Department of Biostatistics, Epidemiology, and Population Health, Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada, Indonesia

mentari.wdst@gmail.com

Abstract

In 2023, as part of the national primary healthcare transformation, Indonesia launched integrated primary healthcare (IPHC), a new service delivery model emphasising on coordinated, comprehensive, and people-centred care employing the life cycle approach across primary care providers at the subdistrict (Puskesmas), village (Unit Pelayanan Kesehatan Desa/Kelurahan/UPKDK), and community levels (Posyandu). This is different from the earlier model, where services were fragmented and limited in scope. IPHC aims to improve patient experience of healthcare services, leading to better health outcomes. This study illustrates patient experience in accessing services across all IPHC provider strata. The study formed part of the IPHC process evaluation in West Sumbawa District, where IPHC was piloted in one Puskesmas. In-depth interviews were conducted in March 2024 with 7 patients across 2 villages, all of whom were women with prior experience utilising services at Puskesmas, UPKDK, and Posyandu. Aligning with the life cycle approach, we recruited pregnant women, mothers of under-five children, women of productive ages, and elderly women. Interview transcripts were analysed thematically using an interpretivist approach. The study yielded three major themes, namely care-seeking preferences, satisfaction, and concerns. Patients gave overall positive remarks across the provider strata, but UPKDK was deemed most preferable due to its accessibility, affordability, and wide ranges of services, enabling individuals with socio-economic disadvantages to seek care. Despite the better-established physical infrastructures and more comprehensive services, Puskesmas was less preferred than UPKDK due to its distance from the villages and more limited opportunity to engage with health workers. In the case of Posyandu, patients named inadequate infrastructures, long queues, and limited delivery as the major drawbacks. Our findings highlighted the need to enhance the quality of providers across all IPHC strata to support effective care integration and improve patient experience and health outcomes.

Keywords: Patient Experience, Service Utilisation, Integrated PHC

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS2-R1-OP44

Evaluation of Tuberculosis Control Program at Prof. Soedomo Dental and Oral Hospital, Gadjah Mada University in 2023

Putri Ardhani¹, Puput Oktamianti², Adang Bachtiar³

^{1,2,3}Department of Health Administration and Policy, Faculty of Public Health, Universitas Indonesia

putriardhani@mail.ugm.ac.id

Abstract

Tuberculosis (TB) is still a global health burden. Indonesia ranks second highest in the world and is a national priority program that is not only funded by the state budget but also by external donors such as global funds and the private sector. However, the rate of case notification is still low, including in specialized hospitals such as dental and oral hospitals with a high risk of infection. More than 15% of TB patients are reported to have oral health problems. RSGM UGM Prof. Soedomo is known to have a low detection rate of TB cases. It has been stated in the Regulation of the Minister of Health No. 67 of 2016, that special hospitals must actively participate in the early detection and reporting of TB cases. This study aims to evaluate the TB program at RSGM UGM Prof. Soedomo in 2023, focusing on input, process, and output components. A qualitative case study approach with data collected from in-depth interviews, document reviews, and observations of selected informants through purposive sampling methods. The results showed that all components of the TB program, including inputs (human resources, infrastructure, financing, information systems, partnerships) and processes (health promotion, surveillance, case search, monitoring) were implemented in accordance with regulations. However, there are challenges such as the lack of use of isolation clinics that indirectly affect hospital finances, delays in case reporting through SITB, educational media that have not been updated, and irregular monitoring. The detection rate of TB cases is zero (0), this is related to the type of special hospital, where TB patients do not seek treatment in special hospitals. In conclusion, the TB program at RSGM UGM has been carried out in accordance with national policies, but further optimization is needed to increase the role of dental and oral hospitals in TB control.

Keywords: Dental and Oral Hospital, Evaluation, Tuberculosis program

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS2-R1-OP7

Data Quality and Influencing Factors of Medical Devices at Primary Health Care Centers in a Rural Area of Yogyakarta Special Region

Ina Amali Fauziah¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia.

ina.a.f@mail.uqm.ac.id

Abstract

Access to medical devices, particularly in rural areas, is essential for the delivery of quality health services. In Maternal and Child Health (MCH), the availability of appropriate medical devices supports early detection, safe delivery, and adequate postnatal care, especially in rural areas. To support equitable access to such equipment, the Indonesian Ministry of Health developed ASPAK (Aplikasi Sarana, Prasarana, dan Alat Kesehatan), a national health information system for monitoring infrastructure and medical devices. Ensuring that ASPAK provides reliable and representative information for decision-making requires high quality data that accurately reflect the actual conditions in healthcare facilities. This study assessed the quality of medical device data in ASPAK and explored the key factors influencing data quality in primary care settings. A mixed-methods case study was conducted involving 30 primary health care centers across Gunungkidul District, Yogyakarta Special Region, between January and March 2025. Quantitative analysis showed low overall data quality, with the highest score reaching 79%, just below the 80% threshold for fair quality. Qualitative findings identified data management as the most critical factor influencing data quality, particularly regarding data control processes, validation mechanisms, and update routines. To address these gaps, researcher recommend that primary health care facilities' managerial or district health offices implement regular capacity-building programs, establish clear accountability structures for data validation, and integrate ASPAK data monitoring into routine supervision. These measures are essential for improving utilization of ASPAK data output, enhancing system reliability, and strengthening maternal and child health service delivery in rural settings.

Keywords: Data Quality, Health Informatics, Maternal and Child Health

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

DIS2-R1-OP79

Analysis of Healthcare Service Utilization by Residents Registered by the Regional Government under the National Health Insurance Program in Labuhanbatu Regency

Sylvana Dyna Theresia¹, Diah Ayu Puspandari²

¹BPJS Kesehatan

²Department of Health Policy Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

sylvanadyna@gmail.com

Abstract

Universal Health Coverage (UHC) was declared by the United Nations on December 12, 2012, to accelerate countries' efforts in achieving universal access to health services. UHC is part of Sustainable Development Goals (SDGs) 3.8, targeting financial protection and access to quality health services. In Indonesia, The National Health Insurance (JKN) program reached 98,19% coverage of the total population in August 2024; however, disparities in healthcare utilization remain especially in rural and regency area. This study aims to analyze the level of healthcare utilization by the Population Registered by the Local Government in Labuhanbatu Regency, identifying enabling and inhibiting factors affecting service utilization. The findings are expected to help the local government evaluate and improve the determinants influencing healthcare utilization rates. A mixed-methods approach is employed. Quantitative analysis, with a descriptive cross-sectional design, will utilize secondary data of 61,632 individuals from BPJS Kesehatan and the Labuhanbatu District Health Office in 2024. To complement the analysis, qualitative methods will be conducted through interviews with respondents from health offices, primary healthcare facilities, and registered individuals who have and have not utilized services, analyzed thematically. The expected findings suggest that the healthcare utilization rate among the registered population is relatively high, though factors such as distance to health facilities, adequacy of health personnel, and type of primary healthcare facilities influence the utilization level. In conclusion, optimizing the availability of infrastructure, fulfilling health personnel requirements, and improving service quality are essential to ensuring more equitable access to health services for all participants under the National Health Insurance Program in Labuhanbatu Regency.

Keywords : National Health Insurance, Healthcare Utilization, UHC.

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS2-R2-OP9

Occupational Traits and Burnout among COVID-19 Emergency Responders on the China-Myanmar Border: A Mixed Method Study

Xizhuo Xie¹, Wisarut Srisintorn², Virasakdi Chongsuvivatwong¹

¹ Department of Epidemiology, Faculty of Medicine, Prince of Songkla University, Hat Yai, Songkhla, Thailand

² Department of Family Medicine and Preventive Medicine, Faculty of Medicine, Prince of Songkla University, Hat Yai, Songkhla, Thailand

cvirasak@medicine.psu.ac.th

Abstract

The COVID-19 pandemic placed extraordinary strain on border regions like the China-Myanmar area, where frequent cross-border movement, prolonged lockdowns, and Myanmar's status as one of Asia's least vaccinated countries created acute challenges for emergency response efforts. Existing research primarily focused on specific industries, with limited understanding of the challenges faced by emergency responders in land border epidemic prevention mechanisms. To fill the knowledge gap, our study aimed to assess the burnout status among COVID-19 emergency responders, identify occupational traits, explore their relationship, and examine potential causes of burnout. We conducted a mixed-method study using cluster sampling to recruit frontline staff, who then shared the study invitation with their original workplaces to invite non-frontline staff. A total of 1,328 frontline and 834 non-frontline workers participated. Latent class analysis identified four occupational traits, as it is well-suited for uncovering unobserved subgroups within heterogeneous populations. Logistic regression was used to examine associations between class membership and burnout risk while adjusting for age and gender. This analytical combination allowed for a nuanced understanding of how different job contexts relate to burnout outcomes. Non-frontline clinical and grid management staff— mainly civil servants and police— had the highest burnout risk, whereas checkpoint enforcement and public service staff had the lowest. To explore the context behind these findings, we conducted semi-structured interviews with 30 frontline workers and managers, purposively sampling diverse occupations until thematic saturation. Interview data revealed key stressors including unsafe working conditions, role overlap, and excessive demands, while team support and strong character strength were protective. These findings underscore the urgent need for targeted interventions to reduce burnout, including improved working conditions, flexible scheduling, and enhanced psychosocial support. However, potential selection bias due to non-random sampling may limit generalizability.

Keywords: Burnout, Emergency Response, Occupational Traits

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS2-R2-OP50

Community Social Support for People with Stigmatized Illnesses: A Qualitative Study on Tuberculosis, HIV/AIDS, and Schizophrenia

Ahmad Naufal¹, Anna Wahyuni Widayanti²

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

²Department of Pharmaceutics, Faculty of Pharmacy, Universitas Gadjah Mada, Yogyakarta, Indonesia

ahmadnaufal@mail.ugm.ac.id

Abstract

Certain illnesses, such as tuberculosis (TB), HIV/AIDS, and schizophrenia, carry strong negative labels in society, which can hinder treatment adherence and recovery among those affected. Community social support plays a critical role in facilitating treatment engagement and improving the quality of life for people living with stigmatized conditions. This study aimed to explore the forms of community support experienced by individuals with TB, HIV/AIDS, and schizophrenia. A qualitative approach was employed, with data collected between January and July 2024 in Sleman District, Indonesia, using community-based settings. Ethical approval was obtained (Ref: KE/FK/1580/EC/2023). We conducted 48 semi-structured interviews through one-on-one and joint interviews with 56 purposively selected participants, including people with schizophrenia, people with HIV/AIDS, people with TB, caregivers, peer supporters, and community health workers. Using inductive thematic analysis, we identified three key findings: (1) Foreign donor programs were central drivers in implementing community-based interventions; (2) Stigma was perceived to be weaker for TB compared to HIV/AIDS and schizophrenia. In our setting, TB was often no longer seen as a stigmatized condition; (3) the organization of community support differed: TB support was time-limited and focused on treatment adherence through CHWs; HIV/AIDS support operated within closed peer communities with mutual knowledge-sharing; and schizophrenia support engaged broader neighbourhood networks, focusing on community rehabilitation and social reintegration by involving patients, families, neighbours, and local governments. The support took various forms, including home visits by CHWs, self-help groups, and small business assistance to promote financial independence. In conclusion, community social support plays a vital role in improving treatment adherence and promoting social reintegration for people living with stigmatized illnesses. However, support models must be responsive to the distinct needs and social contexts of each illness rather than adopting a uniform approach. Expanding community-based interventions through PHC integration or dedicated new health bodies is essential.

Keywords: Community Support, Stigmatized Illness, Schizophrenia

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS2-R2-OP51

Effectiveness of an Online Mindfulness Intervention on Quality of Life Among Overweight and Obese Employees at Universiti Kebangsaan Malaysia (UKM)

Mohd Izhar Ariff¹, Mohd Rizal Abdul Manaf², Nor Ba'lah Abdul Kadir³

¹Department of Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia, 56000, Kuala Lumpur, Malaysia

²Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia, 56000, Kuala Lumpur, Malaysia

³Centre for research in Psychology and Human Well Being, Faculty of Social Science and Humanities, Universiti Kebangsaan Malaysia, Bangi 43600

izhar.ariff@ppukm.ukm.edu.my

Abstract

Overweight and obesity contribute significantly to non-communicable diseases (NCDs) and reduce quality of life (QoL) among employees. Mindfulness interventions may improve QoL by enhancing emotional regulation, reducing stress, and promoting healthier behaviors. This study examined the effectiveness of a six-month online mindfulness program (MyMind) in improving QoL among overweight and obese staff at Universiti Kebangsaan Malaysia (UKM). A total of 142 participants (39 men, 103 women; mean age 41.13 years; BMI ≥ 25.0 kg/m²) were enrolled in a quasi-experimental study. Participants were assigned to the MyMind group, which received weekly online mindfulness sessions, or the MyBody group, which received health consultations, nutrition advice, and lifestyle support from UKM Health Centre staff. QoL was assessed at baseline, 3 months, and 6 months using validated tools. Dropout was low (5.6%). Repeated measures ANOVA was used to evaluate changes in QoL over time. Both groups showed improvements in QoL, but the difference between them was not statistically significant ($F(1,132) = 1.84$, $p = 0.18$, $\eta^2 = 0.01$). The similar outcomes may be due to the overlapping lifestyle support provided to the MyBody group. Additionally, the six-month follow-up may have been too short to capture sustained behavioral changes. In conclusion, the MyMind intervention showed potential for improving QoL among overweight and obese employees. However, future studies should include longer follow-up periods and clearer differentiation between intervention components to better assess long-term effects and isolate the impact of mindfulness practices.

Keywords: Mindfulness, Quality of Life, Overweight

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS2-R2-OP52

Integration of Community Empowerment and Stakeholder Engagement for Sustainable Sanitation in Tanggamus Regency

Vera Yulyani¹, Fatwa Sari Tetra Dewi², Iswanto³

^{1,2,3}Doctoral Program in Medicine and Health Science, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Sleman, Daerah Istimewa Yogyakarta, Indonesia

verayulyani@mail.ugm.ac.id

Abstract

Sustainable sanitation remains a challenge in many rural areas in Indonesia. One of the main problems is the high rate of open defecation relapse among the community, especially among people with low incomes, despite triggering efforts. This study aims to integrate community empowerment approaches and stakeholder involvement in improving sanitation access and behavior in the Kapuran area, Tanggamus Regency, Lampung. Activities were carried out through community-based participatory action research with mixed methods. Data were collected through focus group discussions (FGDs), interviews, pre-tests, and post-tests related to sanitation, field condition observations, and community discussions involving various stakeholders. Based on the results of the talks, the agreed interventions included the construction of low-cost toilet models, forming a community-initiated toilet gathering to support the financing of toilet construction, and triggering clean and healthy living behaviors together with the Health Office and other stakeholders. The results showed that community involvement since the planning stage increased the sense of ownership of the program. At the same time, active support from the local government accelerated the adoption of innovations at the community level. Toilet gathering is an initiative from the community that can encourage collective contributions, accelerate access to proper sanitation, and contribute to behavioral changes from open defecation to healthy sanitation facilities. The collaborative approach of the community and stakeholders has the potential to encourage the achievement of sustainable sanitation. This approach can be replicated in other areas with similar characteristics to accelerate the achievement of national sanitation targets.

Keywords: Community Empowerment, Stakeholder Involvement, Sustainable Sanitation,

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

DIS2-R2-OP14

Association between Family and Peer Smoking Behaviours and Own Smoking Status: Preliminary Findings from A University-Based Survey in Vietnam

Manh Cuong Vu^{1,2} and Wit Wichaidit¹

¹Department of Epidemiology, Faculty of Medicine, Prince of Songkla University, Hat Yai, Thailand

²Health Strategy and Policy Institute, Hanoi, Vietnam

yumanhcuong3111993@gmail.com

Abstract:

There is limited evidence regarding the influence of family and friends on smoking behaviour in Vietnam. The objective of this study is to assess the extent to which self-reported smoking behaviours among family members and peers were associated with one's smoking status among young adults in Vietnam. We conducted a cross-sectional study among undergraduate students at two universities in Hanoi in 2024 using anonymous self-administered questionnaires. We analysed data using descriptive statistics and regression analyses with adjustments for socio-demographic characteristics. Current smoking was most strongly associated with having a father who smoked (Adjusted OR = 5.95, 95% CI = 2.17, 18.09). Having a male or female friend who smoked was also strongly associated with smoking, but the association was not statistically significant. The results of our study are potentially useful for stakeholders in health promotion. However, limitations regarding generalizability, lack of data on psycho-social behavioural drivers, and potential social desirability and recall biases should be considered as points of caution in the interpretation of the study findings.

Keywords: Tobacco Control, Healthy Lives, Family

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
DIS2-R3-OP15

Provider Quality of Hospital Information System: Implications for Healthcare Performance Sustainability in Malaysian Public Hospitals

Muhtd Siv Azhar Merican Abdullah¹, Mohd Rizal Abdul Manaf¹, Azimatun Noor Aizuddin¹

¹Department of Public Health Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia, 56000 Kuala Lumpur, Malaysia.

mrizal@hctm.ukm.edu.my

Abstract

The Hospital Information System (HIS) plays a crucial role in improving hospital management efficiency. The long-term usability of HIS depends on the overall quality of the system and reflects its sustainability. In Malaysia, public hospitals rely on external vendors for HIS implementation, where system quality significantly affects usability, user satisfaction, and net benefits. This study assesses the quality of HIS provided by vendors and its impact on hospital performance. A total of 1,376 respondents were selected using stratified random sampling from six hospitals. Findings indicate that system quality, information quality, and service quality are at a moderate level. The overall HIS quality 5.96, which indicates that the HIS is at a borderline or transitional stage between moderate performance, there are concerns regarding its long-term sustainability and particularly on consistent usability. HIS quality impact on usability and user satisfaction scores range between 6.00 and 7.00, while net benefits fall between 7.00 and 8.00. Post Hoc analysis identifies two hospital groups with significant differences in HIS quality provided by different vendors: Group 1 (Hospital B, Hospital T, Hospital LD) and Group 2 (Hospital SNZ, Hospital SB, Hospital SI). System quality, service quality, and information quality significantly influence user satisfaction and net benefits, with service quality emerging as the most dominant factor. Hospitals in Group A, characterized by lower provider quality scores, rely more on system usefulness to determine overall benefits. In contrast, hospitals in Group B, with better provider quality, experience stronger interactions between system quality, service quality, and user satisfaction. Across all groups, user satisfaction remains a key predictor of net benefits, underscoring the importance of reliable system functionality, service support, and technical assistance. To enhance hospital efficiency, HIS should be optimized to reduce paper usage, improve energy management, and ensure sustainable healthcare practices.

Keywords: Hospital Information Systems, Performance, User Satisfaction.

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation DIS2-R3-OP54

Data Quality Challenges In EMRS For Schizophrenia: Gaps In Completeness And Consistency

Nandani Kusuma Ningtyas¹, Lutfan Lazuardi¹

¹Health Policy and Management Department, Faculty of Medicine, Public Health, and Nursing, University of Gadjah Mada, Yogyakarta

nandanikusumaningtyas@mail.ugm.ac.id

Abstract

Schizophrenia significantly contributes to global disease burden, with affected individuals experiencing higher chronic illness, mortality, and reduced life expectancy. In Indonesia, mental health services are delivered across the life span, but challenges in data collection, reporting, and integration persist. Electronic medical record (EMR) implementation in documentation may have a positive influence on the process and outcome in schizophrenia care. However, it brings unique challenges regarding long term care and is multidisciplinary, requiring staff to record and retrieve information over long periods. Hence, ensuring complete and consistent data is critical for effective schizophrenia management, as it influences diagnosis, treatment planning, and care continuity. This study aimed to evaluate the quality of EMR data for schizophrenia cases at RSJD dr. Arif Zainudin Surakarta using a mixed-methods sequential explanatory design. Quantitative data were collected through observation of EMRs, focusing on completeness and consistency, while qualitative data were obtained via in-depth interviews. Quantitative analysis employed descriptive statistics, and qualitative data were analyzed thematically. Findings revealed that the completeness of the filled EMR data field for schizophrenia cases was 100%. Consistency in recording data was 79.9% for diagnosis, 98.7% for drug administration, and 88.6% for drug replacement or discontinuation. Human-related factors influencing EMR data quality were grouped into themes of commitment and accuracy. Technological factors were categorized into access speed, security, system capability, user perception, and evaluation. Issues contributing to data inconsistency included unfilled diagnosis fields, discrepancies in diagnosis codes, and delays in accessing forms. To improve EMR data quality, the study recommends enhancing user commitment and accuracy through structured assessments, and standardized instruments. Additionally, routine monitoring, real-time data verification, and the alignment of EMR documentation with clinical workflows are essential. Overcoming technological constraints may require supportive government policies and private donors engagement.

Keywords: data quality, electronic medical records, schizophrenia

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
DIS2-R3-OP55

A digital twin-driven machine learning model for predicting air pollution and respiratory disease

Amja Manullang¹, Christophe Viavattene², Xiaohong Gao¹, Huan Nguyen^{1,3}

¹Dept of Computer Science, Middlesex University, London, United Kingdom

²Dept of Natural Sciences, Middlesex University, London, United Kingdom

³International School, Vietnam National University, Hanoi, Vietnam

a.manullang@mdx.ac.uk

Abstract

Digital Twin (DT) technology and machine learning-driven dynamic simulation models offer a promising approach for air pollution forecasting and health impact analysis. DT modeling enhances prediction accuracy by integrating real-time data to effectively address environmental changes. This study aims to develop a prediction model to investigate the impact of air pollution exposure (PM_{2.5} and NO₂) on respiratory diseases, including asthma and chronic obstructive pulmonary disease (COPD). High-resolution, real-time air quality monitoring data will be obtained from Breathe London, an air pollution monitoring network in Greater London. Hospital admissions for respiratory diseases, including asthma and COPD, will be collected from the NHS administrative office in Barnet for the period from January 2025 to December 2025. These datasets will be integrated and analyzed using machine learning techniques, with a Random Forest (RF) model used to train and test the prediction model. Model performance will be comprehensively evaluated using AUC and accuracy to identify the best-performing model. This DT model will enable real-time simulation and prediction of respiratory disease risk from air pollution exposure.

Keywords: Digital twin, machine learning, air pollution, COPD, prediction model.

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation DIS2-R3-OP56

The Urgency of Strengthening Measles-Rubella Surveillance Through Integrated and Interoperable Health Information System

Ina Amali Fauziah¹, Khairani Fauziah², Guardian Yoki Sanjaya¹, Bie Novirenallia Umar³

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia.

²Department of Biostatistics, Epidemiology and Population Health, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia

³Ministry of Health of the Republic of Indonesia

ina.a.f@mail.ugm.ac.id

Abstract

Indonesia set a national target to eliminate measles and rubella by 2023. However, as of 2024, 1,600 confirmed measles cases and 321 confirmed rubella cases were reported across 265 districts in 34 provinces and 134 districts in 26 provinces, respectively. Persistent challenges, such as delays in case detection, incomplete reporting forms, and slow laboratory confirmation, continue to hinder timely response efforts, despite the presence of 18 designated referral laboratories. These barriers highlight the urgent need for a strengthened and integrated surveillance system supported by a responsive information system. This study aims to evaluate the existing Measles Laboratory Information System (MLIS) and identify key requirements for its improvement. A participatory action research approach was employed, involving active engagement of laboratory personnel responsible for measles-rubella testing. Data were collected through desk-review, focus group discussions, in-depth interviews, and observations. The assessment focused on six domains; existing system architecture, data recording processes, functional requirements, infrastructure, user experience, and training needs. Findings revealed that the current MLIS, developed using Epi-Info software, is not web-based, lacks mobile accessibility, and supports only a single user. The system is used exclusively by laboratory staff and relies on paper-based suspected case forms, which are often incomplete. These limitations contribute to delays in data entry and reporting, reduce data quality, and undermine effective public health responses. Given these constraints, the development of an integrated, user-centered, interoperable and integrated surveillance information system is essential. The system should connect healthcare facilities, local health offices, laboratories, and the Ministry of Health, and comply with Indonesia's SATUSEHAT platform based on Fast Healthcare Interoperability Resource (FHIR) standard protocols. A robust digital infrastructure will enable timely, accurate, and comprehensive surveillance to accelerate measles-rubella elimination efforts nationwide.

Keywords: Laboratory Information System, Measles-Rubella Surveillance, Integrated Health Information System

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
DIS2-R3-OP57

Evaluating the Adoption of Smartwatch-Based Patient Monitoring Systems to Promote a Healthy Campus: A Study among the UGM Academic Community

Fajrul Falah Farhany¹, Ina Amali Fauziah², Hanifah Wulandari^{2,3}

¹Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas

Gadjah Mada, Yogyakarta, Indonesia

²Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

³Integrated Healthcare Bureau, Universitas Gadjah Mada

Fajrul Falah Farhany

fajrul.falah.f@mail.ugm.ac.id

Abstract:

Universitas Gadjah Mada (UGM) has adopted the Health Promoting University (HPU) framework to support its healthy campus strategy through preventive measures, routine screenings, and integrated health data systems. One promising innovation supporting this initiative is the use of wearable devices, such as smartwatches, for real-time health monitoring. This study evaluates the adoption of a smartwatch-based Patient Monitoring System (PMS) integrated with UGM's primary healthcare services and explores user perceptions of its functionality and value. A qualitative study was conducted through in-depth interviews with six members of the UGM academic community—including lecturers, administrative staff, students, and retirees—who had used the smartwatch for at least one month prior to a two-week interview period. The Technology Acceptance Model (TAM) guided the analysis, focusing on perceived ease of use, perceived usefulness, resistance to use, and concerns related to data reliability, privacy, and security. The results indicate that the smartwatch was perceived as user-friendly and beneficial for self-monitoring, increasing health awareness, and supporting early detection. Most participants expressed willingness to continue using the device, particularly if it is affordable. However, several usability issues were noted, including a bulky receiver unit, frequent charging needs, lack of clear usage guidance, and discomfort during sleep or specific activities. Concerns were also raised about potential misuse of health data and activity tracking. This study confirms the feasibility and potential value of a smartwatch-based PMS for real-time health monitoring on campus, aligning with the objectives of the HPU framework. While minor technical and usability challenges remain, the overall user acceptance underscores the system's promise for further development and integration into UGM's healthcare infrastructure. Ensuring data accuracy and transparent privacy protection will be essential for building user trust and advancing patient-centered digital health services.

Keywords: Wearable Devices, Health Promoting University, Digital Health Innovation

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Structuring Health Metadata for Sustainability: The SATUSEHAT Metadata Approach

Sensa Gudya Sauma Syahra¹, Ardhina Nugrahaeni¹, Hanifah Maharani¹, Fadhilah Khairuna Larasati¹, Lusha Ayu Astari^{1,3}, Anis Fuad^{1,2}, Guardian Yoki Sanjaya^{1,3}, Dini Prasetyawati¹, Rio Aditya Pratama¹, Hendri Kurniawan Prakosa¹, Saiful Anwar¹

¹Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia 55281

²Department of Biostatistics, Epidemiology and Population Health, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia 55281

³Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia 55281

sensagudya@gmail.com

Abstract

Implementing SATUSEHAT has accelerated the development of an organized and sustainable health metadata system in Indonesia. In collaboration with the Ministry of Health, the team adapted the statistical metadata framework from Statistics Indonesia (BPS Regulation No. 5/2020) into the health sector over 8 months in 2023. This effort produced a metadata model and a public metadata repository called the SATUSEHAT Metadata. The model consists of five interlinked components: program, indicator, aggregate element, variable, and data value. Each program includes indicators derived from numerator and denominator elements, which are built from reporting variables populated with various data values. This structure allows electronic medical records (EMR) transaction data to be transformed into standardized indicators. In particular, the indicator format was developed to align with international frameworks such as WHO's Datadot, supporting global comparability. To ensure long-term use and relevance, SATUSEHAT Metadata is accessible through a web-based interface that enables ongoing documentation, inventory, and version control. These features support sustainable metadata management, even among policy or technological changes. This approach enhances interoperability with existing health information systems and promotes consistent data interpretation across platforms. It also enables the reuse and updating of metadata over time, strengthening health data integration, program monitoring, and evidence-based decision-making. Overall, the SATUSEHAT Metadata initiative has potential to contribute significantly to digital health transformation and the development of a resilient health information ecosystem in Indonesia.

Keywords: health metadata, SATUSEHAT, sustainability

Room 4 - U25A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

DIS2-R4-OP28

Development and Validation of a Malay-Version Questionnaire on Incident Reporting Practices and Associated Factors Among Public Primary Healthcare Workers

Hanis binti Abdul Rani

Universiti Kebangsaan Malaysia

drhanisabdulrani90@gmail.com

Abstract

Incident reporting is a fundamental strategy for improving patient safety, enabling healthcare organizations to identify risks, implement system-level changes, and foster a culture of continuous learning. Despite its importance, incident reporting remains inadequate among healthcare workers in public primary healthcare. A comprehensive literature review identified three existing questionnaires addressing relevant constructs. A new instrument was developed, comprising four constructs: practice, awareness, knowledge, and organization. Four experts established content validity to ensure contextual and cultural appropriateness, while face validity confirmed clarity and usability among the target population. Construct validation for the practice, awareness, and knowledge domains was conducted using item analysis and internal consistency (Kuder-Richardson Formula 20). The organization construct was examined using exploratory factor analysis (EFA) with varimax rotation and reliability analysis via Cronbach's alpha. Four of the 22 initial items for the first three constructs were removed due to poor discrimination and difficulty index, resulting in 18 retained items (KR-20 = 0.57). EFA of the 19 items under the organization construct yielded five distinct components with eigenvalues exceeding 1, representing leadership, management, organizational learning culture, non-punitive response, and communication. The Cronbach's alpha values for these subscales were 0.814, 0.766, 0.833, 0.679, and 0.572, respectively. Despite the lower internal consistency for the non-punitive response and communication subdomains, the overall Cronbach's alpha for the organizational construct was high ($\alpha = 0.863$). The final validated questionnaire consists of 37 items. The Malay-version questionnaire developed in this study is a valid and reliable tool for assessing incident reporting practice, awareness, knowledge, and organization factors among healthcare workers in public primary healthcare. It provides a practical and culturally appropriate tool to support improvements in patient safety and related interventions in primary care settings.

Keywords: Incident Reporting, Healthcare Workers, Primary Healthcare

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DIS2-R4-OP26

Experiences of Service Recipients in Intermediate Care Systems: A Qualitative Study in Two Pilot Sites of Thailand

Nalinee Nakittipha Chuakhamfoo¹, Thi Hue Man Vo ², Thaworn Sakunphanit³ , Phudit Tejavivaddhana⁴

¹Faculty of Social Administration, Thammasat University, Thailand

²ASEAN Centre for Active Ageing and Innovation, Thailand

³ASEAN Institute for Health Development, Mahidol University, Thailand

⁴Office Director of Preventive Medicine Association of Thailand

nalinich@tu.ac.th

Abstract

This study aims to explore the experiences and perceptions of patients and caregivers utilizing Intermediate Care (IMC) services in two selected pilot sites in Thailand. Understanding these experiences is critical for enhancing IMC service delivery by improving operational effectiveness, fostering inter-agency collaboration, and deepening recipients' understanding of the services provided. A qualitative research design was employed, utilizing in-depth interviews with 10 patients and caregivers who had accessed IMC services at the selected sites. Thematic analysis was employed to identify key themes and patterns related to service experiences, operational challenges, and contributions to evidence-informed policy. This study focused on capturing service recipients' firsthand experiences and perceptions, which have been underexplored in previous IMC research dominated by quantitative assessments of service effectiveness. Participants reported difficulties in accessing services, particularly related to inefficient patient transfer processes, limited awareness of available services, and a lack of continuity in care provision. Moreover, resource constraints, including insufficient medical staff and inadequate funding, hindered effective service delivery. Despite these challenges, participants appreciated the efforts of healthcare providers who demonstrated dedication and professionalism. Suggestions for improvement included enhancing communication between facilities, increasing community awareness about IMC services, and ensuring consistent resource allocation to support sustainable service provision. Patients and caregivers appreciated the dedication of healthcare providers and the availability of IMC services. However, challenges persisted, including fragmented coordination, inadequate resources, limited awareness of services, and inconsistent service delivery. Existing policies provided a framework for IMC, but gaps in implementation, resource allocation, and communication hindered effectiveness.

Keywords: Intermediate Care, Patient Experience, Caregiver Experience, Service Coordination, Thailand

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DIS2-R4-OP63

Health Policies Approach in Controlling Electric Cigarette Use Among Indonesian Youth Group

Juniarsih, Nita^{1*}; Hanifah, R.R¹; Atfa, T.W.N¹; Azzahrah, Amalia¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

*nitajuniarsih@mail.uqm.ac.id

Abstract

Indonesia faces a dramatic rise in e-cigarette use among youth, with prevalence increasing from 0.3% in 2015 to 11.9% in 2018 by The Global Adult Tobacco Survey (GATS). This surge poses a major public health concern, given WHO warnings about nicotine's impact on adolescent brain development. This study conducted a narrative literature review of 20 academic and policy sources (2013–2023) to evaluate regulatory strategies targeting youth e-cigarette use, focusing on five policy domains. First, taxation on e-cigarette products in Indonesia remains low and inconsistently applied, failing to deter youth consumption. Second, advertising and promotion—especially via social media—are largely unregulated, exposing adolescents to aggressive marketing. Third, although age restrictions exist, weak enforcement and online sales enable underage access. Fourth, product safety standards are limited, with insufficient labeling and increasing incidents of burns and device malfunctions. Fifth, school- and community-based prevention programs remain sparse, despite global evidence supporting their effectiveness. In contrast, countries like Singapore and Malaysia implement stricter controls, including comprehensive advertising bans, high taxation, and targeted education campaigns. These measures have shown greater success in curbing youth vaping rates. Our analysis reveals Indonesia's fragmented and under-enforced approach across all five domains. We propose a multilevel framework integrating fiscal policy, digital marketing regulation, clear product labeling, and school-based prevention. Such an approach aligns with evidence-based public health principles and contributes to long-term healthcare sustainability by reducing the future burden of nicotine addiction and respiratory disease. This policy reform is urgent to address the health risks facing Indonesian adolescents. A coordinated, preventive strategy is critical to protect this vulnerable group and mitigate a growing public health crisis.

Keywords: E-cigarette policy, Indonesia youth health, evidence-based regulation

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DIS2-R4-OP64

Evaluating Technology-Enabled Primary Healthcare Interventions for Managing Non-Communicable Diseases Linked to Air Pollution in Indonesia: A Study Protocol

Harun Al Rasyid, Asri Maharani, Anna Palagyi, Hari Kusnanto Josef

Doctoral Program of Medical and Health Sciences, Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada, Yogyakarta, Indonesia; Departement of Public Health and Preventive Medicine, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

Division of Nursing, Faculty of Biology, Medicine, and Health, Manchester Academic Health Science Centre, Midwifery and Social Work, School of Health Sciences, University of Manchester, Manchester, UK

The George Institute for Global Health, University of New South Wales, Sydney, Australia

Department of Family Medicine and Community Health, Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada, Yogyakarta, Indonesia

harunalrasyid@mail.uqm.ac.id

Air pollution from urbanisation, industrial emissions, and open plastic waste burning in Indonesia contributes significantly to the burden of non-communicable diseases (NCDs), especially cardiovascular disease (CVD) and chronic obstructive pulmonary disease (COPD), in rural areas. This study, conducted under the NIHR Global Health Research Centre for Non-communicable Disease and Environmental Change, outlines a mixed-methods protocol to evaluate a technology-enabled primary healthcare intervention integrating air quality early warnings, mHealth-supported screening, and community-based CVD and COPD management. A controlled quasi-experimental design will recruit 3,000 high-risk adults aged ≥ 40 years from twelve villages (six intervention sites in Malang and six controls in Banyuwangi) situated near plastic-burning areas. The 12-month intervention includes monthly home visits by trained cadres, clinical decision support for general practitioners via the SMARThealth app, and tailored risk communication using real-time PM_{2.5} sensor data. Primary outcomes, i.e., blood pressure, COPD exacerbations, medication adherence, and engagement with primary care, will be measured pre- and post-intervention. Difference-in-differences and multilevel regression models will be used to estimate intervention effects while accounting for clustering and key covariates. Air quality and residential proximity to pollution sources data will be integrated to examine exposure-response relationships. The qualitative component will use in-depth interviews and focus group discussions with stakeholders, including cadres, patients, village nurses, and general practitioners, to examine intervention fidelity, acceptability, and contextual factors influencing implementation. Process evaluation will be guided by the RE-AIM framework. Findings will generate critical evidence on scalable community-centred models for mitigating air pollution-related NCDs through primary healthcare strengthening. The study is expected to inform national policies aiming at integrated environmental and health system resilience in low-resource settings by 2030.

Keywords: Air Pollution and NCDs, Primary Healthcare Intervention, Community-Based Disease Management

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DIS2-R4-OP97

Unlocking Sustainable Healthcare: Is Green HRM the Key? A Systematic Literature Review

Andang Evrilianto¹ Yaslis Ilyas²

¹Department of Health Policy Administration, Public Health Faculty, University of Indonesia, Indonesia

²Department of Health Policy Administration, Public Health Faculty, University of Indonesia, Indonesia

andang.evrilianto@ui.ac.id

Abstract

The healthcare sector is under increasing pressure to integrate sustainable practices due to growing environmental concerns and resource limitations. Green Human Resource Management (GHRM) has emerged as an essential strategy for achieving sustainability in healthcare organizations. This systematic literature review explored scholarly works published from 2015 to 2025 by accessing key academic databases including Scopus, PubMed, and ScienceDirect. The selection criteria emphasized studies that examined the role of Green Human Resource Management (Green HRM) in promoting environmental sustainability within healthcare organizations. The results show GHRM practices not only contribute to reducing environmental impacts but also foster a culture of sustainability within healthcare organizations. The findings highlight how GHRM practices align with broader sustainability goals, influence organizational culture, and drive evidence-based healthcare policies. This review offers actionable insights for policymakers, hospital administrators, and HR professionals looking to implement GHRM strategies that support sustainable healthcare by 2030.

Keywords: Environmental Culture, Green Human Resource Management, Healthcare Sustainability

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DIS2-R5-OP4

Relationship of Lean Adoption and Operational Performance: Validation of a Questionnaire to Assess Perception Among Healthcare Professional

Azizul Rahman Mohamad Jamil¹, Mohd Rizal Abdul Manaf¹, Sharifa Ezat Wan Puteh¹, Kiran Ganesh Balakrishnan¹

¹Department of Public Health Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM), Kuala Lumpur, Malaysia

azizulrahmanmj@gmail.com

Abstract

The implementation of Lean principles in healthcare has been increasingly linked to improvements in operational performance, efficiency, and resource optimization. Understanding healthcare professionals' perceptions is vital for evaluating its impact and identifying areas for improvement. This study develops and validates a questionnaire to assess their views on Lean adoption and its influence on operational performance in public healthcare facilities in Malaysia. The questionnaire was systematically developed based on an extensive review of existing literature, with key constructs and 50 items carefully selected. A structured expert consensus process was employed, involving two rounds of feedback from the expert panel. First evaluations were conducted among five subject matter experts to assess content validity index (CVI), resulting in a CVI of 0.88 for Scale-CVI/Universal Agreement and 0.964 for Scale-CVI/Average. Two items were removed based on consensus. Following the second round, face validity was further examined by ten healthcare practitioners, including supervisors of nurses, medical assistants, and doctors. The item-level face validity index (Item-FVI) exceeded the cut-off value of 0.8 for all except four items. These four items were revised to enhance clarity based on verbal feedback. The finalized instrument was distributed among 115 healthcare professionals, followed by exploratory factor analysis (EFA) and reliability testing to assess structural validity and internal consistency. Bartlett's test of sphericity was highly significant ($p < 0.001$), confirming dataset suitability for factor analysis. The sampling adequacy for all constructs surpassed 0.6. All questionnaire items exhibited factor loadings above 0.6, indicating construct relevance. The reliability assessment yielded a Cronbach's alpha score of 0.962, indicating strong internal consistency. Findings confirm the robustness of the questionnaire as a measurement tool. This validated instrument enables standardized assessment of Lean adoption, supporting efforts to enhance operational performance and drive continuous improvement in Malaysia's healthcare sector.

Keywords: Lean management, Continuous Improvement, Healthcare Service

Room 5 - U25B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

DIS2-R5-OP5

Cost-effectiveness of a Structured, Multi-Component Training Program for Family Caregivers of Persons with Parkinson's Disease

Nur Izyan Mohd Amin^{1*}, Nor Azlin Mohd Nordin¹, Aniza Ismail²

¹Center for Rehabilitation and Special Needs Studies, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia ² Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Cheras, Kuala Lumpur, Malaysia

izyan.amin13@gmail.com

Abstract

Parkinson's disease (PD), a progressive neurodegenerative disorder, is rising in prevalence in Malaysia, with cases projected to increase from 20,000 to 120,000 by 2040. Despite available treatments, no comprehensive family training program for PD caregivers currently exists. This study evaluates the cost-effectiveness of a structured family training program aimed at improving care for persons with PD (PwP). Forty PD patients (stages I-III) and their caregivers were randomized into experimental and control groups for a 12-week intervention. The experimental group received initial training from a multidisciplinary healthcare team and weekly home-based instructions via a structured module, while the control group received standard care. After 12 weeks, Quality of Life (QOL) in PwP improved significantly in the experimental group, with the health utility index (HUI) increasing from 0.752 to 0.819 ($p=0.017$). Although QOL improvements in the control group were not statistically significant ($p=0.123$), differences between groups remained non-significant ($p=0.302$). Among caregivers, slight but non-significant changes in HUI scores were observed in both groups, which resulted in non-significant difference between groups ($p=0.582$). Cost analysis revealed the experimental group incurred lower costs per participant (RM1,613.84 vs. RM2,443.65), which were statistically significant ($p=0.011$), and achieved better outcomes with a cost per QALY of RM3,202.51 compared to RM9,963.01 in the control group. The ICER calculation of -RM3,208.14 per QALY gained demonstrated economic viability. These findings suggest that while clinical improvements were limited, the structured family training program presents a cost-effective and promising approach to enhancing PD care in Malaysia.

Keyword: Parkinson's Disease, Quality of Life, Cost-effectiveness

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DIS2-R5-OP67

Stakeholder Perspectives on Funding Sustainability for Engaging Private Primary Health Care in Tuberculosis Control: A Qualitative Case Study in Depok Indonesia

Dhea Keyle Fortunandha¹

¹Department of Health Policy and Management Universitas Gadjah Mada

dheakeylefortunandha@mail.ugm.ac.id

Abstract:

As of 2024, Indonesia ranks second globally in tuberculosis (TB) burden, with a significant proportion of patients initially seeking care from private primary health care providers. To improve TB control, local governments have implemented district-level public-private collaborations to engage the private sector. In Depok, an urban area in Indonesia, this strategy has been primarily supported by the Global Fund, raising concerns about long-term financial sustainability after donor withdrawal. This study explores stakeholder perspectives on the financial sustainability of funding mechanisms for engaging private primary health care providers in TB control in Depok City. A qualitative case study was conducted through in-depth interviews with 26 key stakeholders, including representatives from government institutions, legislative bodies, public and private primary health providers, civil society organizations, professional associations, the national health insurance agency, and donor partners. Data were analyzed thematically using NVivo software, guided by the “funding stability” domain from the sustainability capacity framework. Indicators included long-term financial planning, diversity of funding sources, fiscal capacity, institutional policy support, and strategies for post-donor transition, adapted from relevant literature. Findings show that although multiple funding sources—including local government budgets and national transfers—have supported the program, reliance on donor funds remains high. Stakeholders highlighted challenges such as limited budget allocation, the absence of earmarked funds for private providers, and a lack of formalized policies or procedures to ensure sustained private sector involvement. However, they also identified opportunities, including the integration of TB control into long-term development plans, leveraging private sector social responsibility programs, and utilizing community-level budgeting systems. Achieving financial sustainability will require strong policy advocacy, diversification of local funding sources, and the integration of TB programs into formal regional planning and budgeting processes to maintain and strengthen private provider engagement in TB control.

Keywords: Tuberculosis, Sustainability, Private Primary Health Care, Public-Private Mix

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DIS2-R5-OP68

Improving Quality in Primary Health Care (Puskesmas): The Role of District Health Office Supervision in Sleman, Indonesia

Yumna Nur Millati Hanifa¹

¹Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

yumnanurmilatihanifa@mail.ugm.ac.id

Abstract:

Improving the quality of primary health care (PHC) is essential to achieving Indonesia's minimum service standards. In Sleman District, the District Health Office (DHO) established the Tim Pembina Cluster Binaan (TPCB) to provide technical supervision and guidance to Puskesmas. A qualitative study was conducted through in-depth interviews with 15 informants from the DHO and Puskesmas involved in TPCB activities. Data were collected between January and March 2025 and interpreted using a logical model framework focusing on input, process, output, and outcome. The study was conducted under academic supervision as part of a postgraduate research project. The results showed that heavy workloads at Puskesmas led to suboptimal performance from both Puskesmas and supervisory teams. Supervision primarily focused on administrative compliance rather than on substantive quality improvement. The prevailing service paradigm emphasized the fulfillment of routine obligations without fostering a culture of innovation or competitive quality enhancement. Moreover, understanding of service quality was largely limited to formal indicators without integration across all service activities. These final results highlight the need to shift from compliance-based supervision toward a more developmental and quality-oriented approach. Supportive monitoring systems—featuring clear goals, structured feedback, and appropriate incentives—are critical to enabling Puskesmas to evolve into high-performing PHC providers.

Keywords: primary health care, service quality, district health office

Room 6 - R.201 IKM Building 2nd Floor : Health Data Innovation and Digital Transformation
DIS2-R6-OP18

Determinants of Virtual Consultation Service Acceptance in Antenatal Care

Halila Mohamed¹, Aniza Ismail¹, Rosnah Sutan¹

¹Department of Public Health Medicine, Faculty of Medicine, National University of Malaysia
p113690@siswa.ukm.edu.my

Abstract

As digital health technologies gain prominence in maternal care, virtual consultation services (VCS) comprising video and phone consultations are increasingly integrated into routine antenatal care delivery. This shift in practice underscores the need to examine the factors influencing the acceptance and usage of such services among expectant mothers. This study aimed to identify the key determinants shaping the acceptance of VCS, with behavioural intention (BI) as the measure of acceptance. A cross-sectional study was conducted among 255 antenatal mothers (mean age 29.3 years, predominantly Millennials) attending selected primary health clinics across urban regions in Malaysia. The study integrates the Unified Theory of Acceptance and Use of Technology (UTAUT) with the Information Systems Success Model and incorporates health literacy (HL) as an additional construct. Income and education were examined as moderating variables. Age was not analysed as a variable due to limited variation, as most respondents were within the typical childbearing age range. Structural equation modelling (SEM) was employed to test the hypothesised relationships. The model explained 62% of the variance in BI. HL emerged as the strongest predictor of VCS acceptance, followed by social influence (SI), facilitating conditions (FC), and performance expectancy (PE). Effort expectancy (EE) was not statistically significant. User satisfaction (US) not only emerged as one of the strongest predictors of VCS adoption behaviour but also fully mediated the effects of system quality (SYQ) and service quality (SVQ) on behavioural intention to use the service. Additionally, income and education significantly influenced the strength of associations between key predictors and the acceptance of VCS. These insights highlight the importance of improving digital health literacy, enhancing user satisfaction through system and service quality, and addressing socioeconomic disparities to support effective and sustainable implementation of VCS in antenatal care settings.

Keywords: virtual consultation service, digital health, antenatal care

Room 6 - R.201 IKM Building 2nd Floor : Health Data Innovation and Digital Transformation
DIS2-R6-OP72

Evaluating User Engagement with NusaCare: A Self-Management App for Diabetes and Prediabetes

Hendri Kurniawan Prakosa³, Annisa Ristya Rahmanti^{1,2}, Guardian Yoki Sanjaya^{1,3}, Anis Fuad^{1,3}, Sensa Gudya Sauma Syahra³, Candra³, Milleen Rahman Hakim³

¹Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia 55281

²Faculty of Science and Technology, Middlesex University, London, United Kingdom

³Center for Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia 55281

hendri.kurniawan.p@gmail.com

Abstract

Diabetes mellitus (DM) and prediabetes (PreDM) are global health problems that continue to rise, including in Indonesia. One of the main challenges is the low individual awareness of self-management, which is crucial for controlling these conditions. This study evaluated user engagement with NusaCare, a prototype platform designed to assist DM and PreDM patients through lifestyle tracking, education, and personalized interventions. The trial was conducted over 5 months and involved 61 participants, 68.85% of whom were DM patients. The results showed that the Challenge (70%) and Food Tracking (42.86%) features were the most frequently used, primarily by DM users (60.47% and 64%, respectively). Demographically, female users were more active, particularly with the “Lab Results” and “Medication Reminders” features. By age group, Generation X demonstrated the highest engagement, while Baby Boomers showed the lowest, possibly due to lower digital literacy. Millennials were especially active with features incorporating gamification elements. The study also found that users who actively engaged with NusaCare experienced an improvement in quality of life (p -value = 0.031). Understanding these demographic patterns is essential for developing targeted engagement strategies. To increase adoption among Baby Boomers, efforts could focus on simplifying the user interface, providing digital literacy training, and offering onboarding support. By aligning the app’s approach with the unique needs of each user group, NusaCare can become a more effective tool in supporting digital self-management and control of diabetes.

Keywords: diabetes and prediabetes, NusaCare, self-care management

Room 6 - R.201 IKM Building 2nd Floor : Health Data Innovation and Digital Transformation
DIS2-R6-OP73

Implementation of the SIKAL in BPAFK Surakarta: A Digital Innovation to Strengthen Medical Device Quality Assurance

Tia Pramesti Nur Jannah¹, Rohmadi², Noviana Margiastuti²

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

²Balai Pengamanan Alat dan Fasilitas Kesehatan (BPAFK) Surakarta, Indonesia

tia.ti14@mail.ugm.ac.id / tpramesti.njannah@mail.kemkes.go.id

Abstract:

Ensuring the safety and quality of medical devices is vital to promoting patient safety in health services. To this end, post-market surveillance is of critical significance. BPAFK Surakarta, as the Health Facilities Safety Center, in mitigating challenges with inefficiencies and possible human error in manual processes to manage more than 25,000 medical device certificates per year, in 2022 developed SIKAL, an integrated digital system for calibration and assessment of medical devices. This proposal research adopts a qualitative descriptive approach with a case study design to examine the policy and technical implications of SIKAL implementation in BPAFK Surakarta through document analysis (SIKAL manuals, BPAFK's policy documents, implementation reports) and participatory observation of stakeholders (selected based on role minimum 6 months' experience with SIKAL). The main elements that were tested include system functionality, resource requirements, user readiness, and impact on operational and regulatory performance. SIKAL contains ten modules, decreased administrative time, scheduling and reporting automation, and enhanced precision of calibration results then will be integrated with ASPAK (ministry of health's medical device monitoring application) and other existing government applications. Real-time monitoring functionality allows for the early identification of deviations in equipment performance, while the digital record system allows for longitudinal analysis of data. Successful implementation of SIKAL required large-scale IT infrastructure, data security measures, and end-user training. Continual technical support, interfacing of the system with existing health information systems, and continual evaluation were found to be critical implementation tactics. This study will deliver a policy brief and targeted recommendations to support SIKAL's role in the health sector's digital transformation, enhancing device safety, service quality, and public trust.

Keywords: medical device, digital health system, quality assurance

Room 6 - R.201 IKM Building 2nd Floor : Health Data Innovation and Digital Transformation
DIS2-R6-OP74

Mobility and Malaria Incidence in Indonesia's Low-Endemic Areas during the COVID-19 Period

Risalia Reni Arisanti^{1,2}, Ahmad Watsiq Maula^{1,2}, Riris Andono Ahmad^{1,2}, Adi Utarini^{2,3}

¹Department of Biostatistics, Epidemiology and Population Health, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia;

²Center of Tropical Medicine, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia;

³Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

risalia.reni.a@mail.ugm.ac.id

Abstract

Human mobility significantly impacts the transmission and persistence of malaria, even in low-endemic areas. The COVID-19 pandemic caused significant shifts in mobility patterns across Indonesia. This study explores the mobility changes in COVID-19-affected malaria incidence in low-endemic districts. The study was conducted from March 2020 to May 2022 in four districts: Kulon Progo, and Purworejo (Java area) and Tanah Laut and Tanah Bumbu (non-Java areas). Data were collected from district health office reports on COVID-19 cases, mobility data from Facebook, malaria examination and case reports from the district's electronic system. Descriptive analysis and Poisson regression were used to analyze the data. A total of 480,575 mobility records were analyzed, showing that mobility peaked in 2021, with the non-Java area, especially Tanah Bumbu, exhibiting the highest mobility rates (36.6%). In Java, most mobility came from elimination areas (>80%), while non-Java areas showed mobility from low-endemic regions (48.5% and 87.9%). In Purworejo, mobility fluctuated in 2020, peaking in March and May 2021, correlating with a rise in malaria cases. In Kulon Progo, mobility showed minimal increases, but malaria cases spiked in late 2021 and early 2022. No clear pattern was found between mobility and malaria cases in Tanah Bumbu and Tanah Laut. Malaria examination rates dropped significantly during the early pandemic months. The incidence of malaria in non-Java areas was 64% lower than in Java, with increased mobility linked to higher malaria incidence. The study found that mobility, malaria screening, and COVID-19 positivity were significantly associated with higher malaria incidence (IRR 1.25, 2.33, and 1.12, respectively; $p < 0.001$). Mobility remains a crucial factor in malaria control, although its relationship is complex and context-dependent, influenced by local endemicity patterns. Targeted interventions during such periods are essential to prevent a resurgence of the disease.

Keyword: malaria, low-endemic, COVID-19

Room 6 - R.201 IKM Building 2nd Floor : Health Data Innovation and Digital Transformation DIS2-R6-OP75

Nusa Care and SmartHealth Mobile: Supporting Integrated Health Data Management in Primary Care

Nela Afirda Prastika¹, Hendri Kurniawan Prakosa², Hanifah Wulandari^{1,3}

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia.

²Universitas Amikom Yogyakarta, Indonesia

³Integrated Healthcare Bureau, Universitas Gadjah Mada, Yogyakarta, Indonesia

nelaafirda123@gmail.com

Abstract

Primary healthcare in Indonesia faces challenges such as fragmented patient data, administrative burden, and limited resources. Digital transformation is key to improving service quality and clinical decision-making. NusaCare was developed as a personal health record (PHR) that allows patients to access and manage health data. Meanwhile, SmartHealth Mobile supports public health data collection at the community level. Integration of these platforms aims to improve service efficiency, continuity of care, and a patient-centered service approach. A pilot case study was conducted in the routine health services of FK-KMK UGM under the Health Promoting University (HPU) program. A total of 91 academic community members were asked to install NusaCare and 15 health workers used SmartHealth Mobile. Data was analyzed qualitatively based on structured observation to assess functionality, ease of use, and impact on efficiency and accuracy of recording. Results showed most participants were female (78%) with a proportion experiencing non-communicable disease (NCD) risk factors: hypertension (65%), high cholesterol (58%), high blood sugar (51%), and high uric acid (40%). This emphasizes the importance of continuous and affordable health monitoring. Trials showed NusaCare and SmartHealth Mobile can streamline workflows, reduce manual effort for healthcare workers, and use color-coded screening algorithms: green (normal), yellow (caution), orange (alert), and red (emergency) as decision support. Patients access results through NusaCare, with data stored in faculty's Sehati Clinic electronic medical record. Barriers include the need for a stable internet connection and consistent workflow. To improve usability, it is recommended to assign different tasks between health workers conducting examinations and those inputting results. In conclusion, the implementation of NusaCare and SmartHealth Mobile could be used to monitor health status, support early detection, and encourage healthy lifestyle changes. These applications have the potential to drive digital transformation of primary care through improved data access, service coordination, and healthcare continuity

Keywords: Electronic Medical Record, Primary Health Care, Health Data Integration

Room 6 - R.201 IKM Building 2nd Floor : Health Data Innovation and Digital Transformation
DIS2-R6-OP76

Improving the Quality of Health Information Through Evaluation of Electronic Medical Record Data Quality

Muhriati¹, Lutfan Lazuardi¹

¹Department of Health Policy and Management, Faculty of Medicine, Health Management, and Nursing, Universitas Gadjah Mada

muhriati1984@mail.ugm.ac.id

Abstract

The implementation of Electronic Medical Records (EMRs) is one of the government's efforts to support health transformation in Indonesia, reinforced by Ministry of Health Regulation Number 24 of 2022 concerning medical record management. EMRs offer significant potential benefits in improving the quality of healthcare services and patient information access. However, challenges remain, particularly in terms of data quality. Data quality is crucial as it directly affects patient care outcomes; poor EMR data quality can lead to patient dissatisfaction, increased costs, and reduced service effectiveness. This study aims to evaluate the quality of EMR data by assessing completeness, correctness, and timeliness, as well as to explore the factors influencing EMR data quality in the outpatient department of RSUD La Patarai Barru, focusing on human, organizational, managerial, technical, and external aspects. An explanatory case study with a single embedded design was employed. Primary data were collected through in-depth interviews with 13 purposively selected respondents and analyzed using thematic analysis. Secondary data were collected from 372 outpatient EMRs from December 2024 to February 2025 using simple random sampling. The study found persistent incompleteness in EMR data entry. Contributing factors included limitations of the existing system, suboptimal network infrastructure, the absence of formal policies regarding EMR data entry, and the lack of regular audit practices. It is recommended that RSUD La Patarai Barru develop formal policies on EMR data entry, conduct regular staff training and socialization, strengthen network capacity, develop notification features to support data completeness, and implement periodic audits to maintain and enhance the quality of electronic medical record data.

Keywords: Electronic Medical Records (EMR), Data Quality, Data Completeness

ORAL PRESENTATION DAY 2 : 18TH JUNE 2025 (WEDNESDAY)

Room 1 - Auditorium FKMK : Community-Centered Health and Health Workforce Promotion

DIS1-R1-OP35

"Kiambang Merah" : A Tripartite Collaborative Framework for Social Entrepreneurship in Addressing Period Poverty

Nor Faiza Mohd. Tohit¹, Siti Athirah Zafirah Abdul Rashid¹, Wan Farizatul Shima Wan Ahmad
Fakuradzi¹, Nur 'Adnin Ahmad Zaidi¹

¹Community Health Unit, Faculty of Medicine and Defence Health, National University of Defence
Malaysia

faizatohit@upnm.edu.my

Abstract

Period poverty remains a significant public health challenge, particularly in underserved communities. This study presents the development and implementation of 'Kiambang Merah', an innovative framework for social entrepreneurship aimed at combating period poverty through the production of reusable menstrual pads. The primary objective is to create a sustainable, replicable model that integrates the efforts of NGOs, local targeted communities, and universities in addressing menstrual health issues whilst promoting economic empowerment. The Kiambang Merah framework is built on a tripartite collaboration model, integrating the efforts of NGOs, local targeted communities, and university. This study employed action research methodology, engaging stakeholders from each sector over a 12-month period in a lower-income community in Malaysia. The framework comprises four key phases: 1) Collaborative needs assessment and planning, 2) Capacity building and skills transfer, 3) Sustainable production and community engagement, and 4) Continuous evaluation and improvement. University provides technical expertise and research support, NGOs facilitate community engagement and resource mobilization, while local communities drive the production and distribution of reusable menstrual pads. Initial implementation of the Kiambang Merah framework demonstrated promising results. Quantitative and qualitative data collected through surveys, focus groups, and key informant interviews revealed increased access to affordable menstrual products, enhanced menstrual health knowledge, and improved economic opportunities within target communities. The framework's emphasis on cross-sector collaboration and local empowerment offers a sustainable approach to addressing period poverty. By leveraging the strengths of each partner, Kiambang Merah presents a replicable model for social entrepreneurship in public health. Further research is needed to assess long-term impacts and adaptability to different cultural contexts.

Keywords: Period poverty, social entrepreneurship, collaborative framework

Room 1 - Auditorium FKKMK : Community-Centered Health and Health Workforce Promotion

D2S1-R1-OP84

Building Health System Resilience through Acceptability: A Study on Child Violence Response Programs in Primary Health Care in Kota Medan, Indonesia

Annisa Zahara^{1*}, Likke Prawidya Putri¹, Tiara Marthias²

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

²Nossal Institute for Global Health, University of Melbourne

annisazahara@mail.uqm.ac.id

Abstract

Child protection, especially from violence, is a critical investment for sustainable development. Despite strong policy frameworks and global commitments, many cases of child violence remain unreported, and access to services for victims still limited. Kota Medan, which records the highest number cases in North Sumatra, reveals significant system gaps in early detection and intervention at the primary healthcare level. This qualitative descriptive study explores the acceptability of child violence response programs in North Medan's primary healthcare. The study is guided by Sekhon's Theoretical Framework of Acceptability. Data were collected through in-depth interviews with 17 stakeholders, including healthcare providers, child protection institutions, and social service agencies. Ethical approval for this study was obtained from the Research Ethics Committee of the Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada. The data analysis is ongoing, but preliminary findings show strong emotional commitment from health workers. However, key structural vulnerabilities were also identified, such as limited human resources, lack of standardized procedures, and weak cross sector coordination. Additional barriers include ethical dilemmas, the normalization of violence at the community level, and fear of retaliation. Challenges like perceived burden and low self efficacy, often due to a lack of training and psychosocial support, highlight the need to strengthen workforce resilience. Nvivo software will be used to assist in thematic data analysis. This study emphasizes that improving the acceptability of such programs is essential for their sustainability and for preventing the long term impacts of Adverse Childhood Experiences (ACE). Full findings will contribute to strategies for strengthening frontline system responses.

Keywords: Child Violence Response, Health System Resilience, Primary Healthcare, Acceptability, Adverse Childhood Experiences

Room 1 - Auditorium FKMK : Community-Centered Health and Health Workforce Promotion

D2S1-R1-OP85

Feasibility of Implementing the Cardiovascular Network Fostering Programme in Yogyakarta Special Region: Perspectives of Health Workers and Stakeholders

Nida Fauziah Sudrajat¹

¹Department of Health Policy Management, Gadjah Mada University, Yogyakarta

nidafauziahsudrajat@mail.ugm.ac.id

Abstract

Cardiovascular disease (CVD) remains the leading cause of mortality in Indonesia, placing a substantial burden on the national healthcare system. The Basic Health Research (Riskesdas) reported an increase in heart disease prevalence from 0.5% in 2013 to 1.5% in 2018. In 2021, CVD accounted for the highest health expenditure under the National Health Insurance (JKN), amounting to IDR 7.7 trillion. According to the 2023 Indonesian Health Survey (SKI), the Special Region of Yogyakarta recorded the highest national prevalence of heart disease at 1.67%. In response, the Ministry of Health launched the Cardiovascular Network Fostering Programme to strengthen system resilience by improving referral integration and service quality across healthcare facilities. This study aims to assess the feasibility of implementing the programme in the Special Region of Yogyakarta using a qualitative approach. Data will be collected through in-depth interviews, observations, and document analysis at three hospitals—RSUP Dr Sardjito, RSUD Wates, and RSUD Wonosari. The analysis will be guided by the Feasibility, Impact, and Manageability (FIM) framework as proposed by Taylor, exploring the technical and operational feasibility, potential impact on referral systems and service quality, and the manageability of the programme within hospital settings. Key factors such as healthcare workers' knowledge, referral gaps, resource availability, and institutional support will be examined. The unit of analysis is the cardiovascular mentorship scheme in the Special Region of Yogyakarta. The findings are expected to inform strategic recommendations to enhance implementation, improve hospital integration, and ensure the long-term sustainability of the programme.

Keywords: Cardiovascular Network Fostering Program, feasibility, FIM, hospital integration, Yogyakarta Special Region

Room 1 - Auditorium FKKMK : Community-Centered Health and Health Workforce Promotion

D2S1-R1-OP86

Physician-Manager in Crisis: Legal Clarity for Dual Roles to Strengthen Indonesia's Hospital Resilience

Luh Virsa Paradissa¹

¹Universitas Gadjah Mada

virsa.paradissa@gmail.com

Abstract

Leadership is an essential element for the resilience of Indonesia's health system. The implementation of Universal Health Coverage (UHC/JKN), increasing service demands, and pressure to meet international accreditation standards have significantly transformed the healthcare landscape, requiring that doctors undertake both clinical and managerial roles in hospitals. Physicians, who were formerly centered on clinical tasks such as diagnosis, treatment, and patient care, are now taking on greater managerial responsibilities. This study examined how the dual responsibilities of physician-managers affect the resilience of hospital systems and proposed transformative solutions tailored to Indonesia's context.

The research utilizes a normative legal research methodology, using both statutory and conceptual approaches. Qualitative data analysis was conducted, and the results were presented descriptively.

This study revealed three critical findings. First, the function of the physician-manager in hospitals encompasses both advantageous outcomes and challenges when analyzed through the lenses of legal frameworks and role conflict theory. Second, the external elements—political, economic, social, technological, legal, and environmental—greatly affect how policies are made and how things are run. To maintain hospital resiliency, physician-managers must develop adaptive leadership skills to balance clinical and administrative tasks. Systematic analysis reveals five essential variables that are pivotal for effective dual leadership among physician-managers in hospital settings. The patient experience, the complex intersection of societal and health issues, the payer-provider partnership, the needs and expectations of the healthcare workforce, and the rapid advancement in digital technology (including big data) all fall under this category. Third, mandating the dyad leadership model to segregate clinical and administrative duties and boosting interprofessional training to prepare physician-managers to organize cross-sector teams during disasters are priorities. Among the many elements that will establish the foundations of a resilient health system, the author argues that clear legal definitions of dual roles are essential.

Keywords: physician-manager, dual-role, hospital-resilience, health law, health system

Room 1 - Auditorium FKKMK : Community-Centered Health and Health Workforce Promotion

D2S1-R1-OP88

Community-Based Supervision Mechanisms in South Manokwari District

Agus Salim¹, Faisal Mansur¹, Mubasysyir Hasanbasri²

¹Center for Health Policy and Management Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia;

²Master of Public Health Study Program Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

agussalim53535@gmail.com

Abstract

South Manokwari District is currently facing critical public health challenges, marked by a maternal mortality rate of three cases and eight infant deaths in 2024, along with a high HIV prevalence of 745 cases. These indicators suggest significant weaknesses in the health system's capacity and responsiveness. In this context, community groups and village-based organizations are playing an increasingly vital role in addressing these issues. This study aims to evaluate the effectiveness of the Community-Based Supervision Mechanism (CBSM) in fostering community participation and enhancing the responsiveness of the local health system. Using a descriptive evaluation approach, data was collected through participatory observation in two villages over a four-month period, in-depth interviews with 15 stakeholders, and analysis of regional health and development policy documents. Findings reveal that Posyandu (integrated health posts) emerge as the most effective community actor within CBSM due to their strong social connections, adaptability, and ability to mobilize local participation. Village heads and NGOs also demonstrate significant impact through similar strengths. In contrast, Puskesmas and village clinics face limitations, particularly in community engagement and accessibility. Integration of CBSM into the village development planning process has improved the speed and accuracy of health reporting and responses. The study highlights the necessity of empowering local actors and enhancing intersectoral collaboration to strengthen health oversight mechanisms in remote and underserved areas. Strengthening the roles of Posyandu, village heads, and NGOs within CBSM is crucial to ensuring a more responsive, inclusive, and sustainable public health system. By embedding health supervision into local governance and development structures, remote regions like South Manokwari can better address ongoing health challenges and improve outcomes for maternal, child, and infectious disease care.

Keywords: community-based supervision mechanism, health cadres, collaboration, health programs, South Manokwari District

Room 2.3 - R.8AB Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D2SI-R2-OP89

Learning Methods for Clinical Terminology: A Scoping Review

Nanda Aula Rumana^{1,2}, Arief Budiyanto³, Lutfan Lazuardi⁴, Savitri Citra Budi⁵, Dian Mawarni⁶

¹Medical Record dan Health Information Study Program, Faculty of Medicine, and Health Sciences, Universitas Esa Unggul, Indonesia.

²Doctoral Student, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia.

³Department of Dermatology and Venereology Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia.

⁴Department of Health Policy Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

⁵Department of Health Information and Services, Vocational School, Universitas Gadjah Mada, Yogyakarta, Indonesia

⁶Department of Public Health, Faculty of Sport Science, Universitas Negeri Malang, Malang, East Java, Indonesia

nanda.rumana@esaunggul.ac.id

Abstract

This study aims to systematically map available evidence regarding learning methods employed in teaching clinical terminologies, specifically SNOMED CT, ICD-10, ICD-9-CM, and LOINC, to health students and professionals across diverse educational settings. Employing a scoping review methodology guided by the Joanna Briggs Institute and reported according to the PRISMA-ScR checklist, this research utilized the Population, Concept, Context (PCC) framework. The Population included health students (e.g., medical, nursing) and healthcare professionals, the Concept encompassed learning methods, and the Context related explicitly to clinical terminology education.

A systematic search was conducted using key databases including PubMed, Scopus, and Web of Science, with specific search terms such as "medical term*", "clinical term*", "snomed-ct", "ICD-10", "ICD-9", "LOINC", "learning", "teaching", "learning method", "teaching method", "instruction", "education", "training", "student*", "healthcare professional" and "Health Personnel". No publication date restrictions were applied to the studies considered eligible, inclusion criteria is original peer-reviewed research focusing on educational interventions for clinical terminologies. An initial collection of 29 relevant articles was identified and reviewed.

Findings indicate a broad range of learning approaches implemented, notably mobile learning, asynchronous online learning, gamified digital platforms, AI-driven chatbot applications, and digital multimedia platforms. The most frequently utilized methods were gamification and mobile learning technologies. Commonly reported outcomes included significant improvements in terminology comprehension, coding accuracy, learning motivation, and increased confidence in clinical documentation practices. However, noticeable variations existed regarding instructional design quality, assessment strategies, and depth of content delivery, highlighting the challenges in standardizing educational interventions.

The review concludes that although innovative and effective educational strategies have been identified, there remains a critical need for standardized, evidence-based frameworks to consistently enhance clinical terminology education. Future educational interventions should integrate interactive and technology-supported approaches to optimize learning outcomes in clinical settings, particularly within the context of Indonesia's ongoing national health terminology standardization efforts, including the adoption of SNOMED CT.

Keywords: clinical terminology, health education, learning methods, SNOMED CT, ICD-10, ICD-9-CM, LOINC

Room 2.3 - R.8AB Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D2S1-R2-OP90

Barriers and Enablers in Implementing Telemedicine at RS Pratama Sailus, Pangkep Regency's Remote Islands: Advancing Healthcare Access

Renaldi¹

¹Department of Health Policy and Management; Faculty of Medicine, Public Health and Nursing; Universitas Gadjah Mada, Yogyakarta, Indonesia

renaldi@ugm.mail.ac.id

Abstract

Telemedicine holds promise for overcoming healthcare access barriers in remote island regions. RS Pratama Sailus, a newly established Class D hospital on Sailus Island, Pangkep Regency, South Sulawesi, serves as a primary referral center for remote island communities, linked to local Puskesmas and higher-level hospitals. This qualitative case study aims to investigate barriers and enablers in implementing referral-based telemedicine, focusing on obstetrics and general consultations to address specialist shortages. The study will conduct in-depth interviews with 10 hospital staff (doctors, nurses, midwives) and 5 patients, complemented by three months of planned observations of telemedicine workflows and technical challenges, to investigate technological infrastructure (e.g., internet reliability, diagnostic equipment), workforce readiness, patient cultural acceptance, and the absence of BPJS Kesehatan partnership, which increases out-of-pocket costs. By addressing a knowledge gap in telemedicine adoption in resource-constrained, newly established hospitals, the study will deliver a telemedicine implementation framework, community engagement strategies, and policy recommendations for BPJS Kesehatan integration and infrastructure subsidies. These findings will inform digital health strategies in developing nations' island regions, advancing equitable healthcare delivery.

Keywords: Telemedicine, Remote Islands, Healthcare Access, Digital Health, Resource-Constrained Settings

Room 2.3 - R.8AB Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D2S1-R2-OP91

Evaluation of Dashboard Utilization in Emergency Department: A Mixed-Method Study

Happy Indah Kusumawati^{1,2}, Syahirul Alim,¹ Luluk Lusiantoro,³ Adi Utarini^{2,4}

¹Department of Basic and Emergency Nursing, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

² Doctoral Program in Public Health, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

³Center for Logistics and Supply Chain Management, Department of Management, Faculty of Economics and Business, Universitas Gadjah Mada, Yogyakarta, Indonesia

⁴Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

happy.i.kusumawati@ugm.ac.id

Abstract

Monitoring and coordination in Emergency Departments (ED) are increasingly important as operational pressures grow. A management dashboard offers a centralized visual interface to aid both clinical and operational decisions by presenting critical data such as patient length of stay (LOS) and response times. While dashboard use has expanded globally, there remains a gap in research on its implementation in Indonesian healthcare settings. This study aimed to explore the development and effectiveness of an ED management dashboard at the Academic Hospital, Universitas Gadjah Mada. Using an exploratory sequential mixed-methods approach, researchers conducted four semi-structured interviews and three focus group discussions (FGDs) with ED staff in March 2025, followed by observational and survey data collection. Themes emerging from qualitative data included optimization of patient flow, existing barriers to care, and the need for dashboard-based decision support. Quantitative data showed an average ED LOS of 3 hours and 51 minutes, with specialist consultations and lab result delays as major bottlenecks. A survey of 62 participants (53% doctors, 47% nurses) revealed a System Usability Scale (SUS) score of 55.64, indicating suboptimal usability. The Situational Awareness Index (SAI) averaged 3.09, with the highest ratings for complexity representation and the lowest for content relevance on the dashboard. These findings suggest that while the dashboard addresses critical needs, its current design falls short in usability and effective situational awareness. Converging data supported a redesign of the system to better align with ED staff needs. The study concludes that dashboard implementation in the ED has potential to enhance patient flow and clinical awareness, but requires significant improvement in usability and content clarity to fulfill its intended function. Continued iteration and stakeholder engagement are essential to realize the full benefits of digital decision-support tools in emergency healthcare contexts.

Keywords: dashboard, emergency department, length of stay, situational awareness, usability

Room 2.3 - R.8AB Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D2S1-R2-OP92

The Role of ASPAK in Supporting Evaluation of Essential Medical Devices: Lessons from Cardiovascular Program Needs

Vivi Ninda Sutriana^{1*}, Anis Fuad², Guardian Yoki Sanjaya³, Rio Aditya Pratama³, Khairani Fauziah³, Asmaranto Prajoko⁴, Ferdinandus Ferry Kandau⁴, Hosen Pasaribu⁴, Rakhmat Nugroho⁴, Irene Sirait⁵, Michael Krautamann⁵

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia.

²Department of Biostatistics, Epidemiology and Population Health, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia

³Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia.

⁴Ministry of Health of the Republic of Indonesia

⁵PATH Indonesia

vivi.ninda.s@mail.uqm.ac.id

Abstract

ASPAK is a national information system that plays an essential role in monitoring medical devices in Indonesia. It has evolved to include features such as planning and distribution of devices, utilization review, and reporting of non-functional equipment. Cardiovascular disease is a national health priority requiring accurate monitoring of device availability, particularly catheterization laboratories (cath labs). This study aims to examine ASPAK's role in tracking essential medical devices, with cath labs as a case example within the cardiovascular program. As of the first quarter of 2025, ASPAK recorded 355 cath lab units distributed across hospitals. The distribution was analyzed by island regions/provinces, and device-to-population ratios were calculated to illustrate service coverage. ASPAK's dashboard, built on routine data on infrastructure and equipment (SPA), provides a valuable tool for visualizing device availability. A 2022 study had reported 310 cath lab units distributed nationally. With support from KJSU and SIHREN programs, further increases in device numbers are expected in the coming years. Despite this, challenges remain in optimizing ASPAK's use through integration with human resource data and other facility indicators to monitor equipment utilization effectively. Cath lab data in ASPAK has strong potential for supporting analysis of cardiovascular device availability. However, integration with data on health personnel and complementary infrastructure is necessary to assess hospital readiness for cath lab services. In conclusion, ASPAK plays a key role in monitoring the distribution and availability of medical devices. To maximize its utility in evaluating device use and informing health policies, integration with external data sources is essential. This approach can strengthen planning, development, and service provision, especially in support of cardiovascular health programs.

Keywords: ASPAK, medical devices, cath lab, cardiovascular programs, data monitoring

Room 2.3 - R.8AB Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D2S1-R2-OP93

Automated Conversion of Indonesian Electronic Medical Records to SNOMED-CT Using OpenAI

Putu Gede Purwa Darmawan¹

¹Health Policy and Management Department, Universitas Gadjah Mada

putugedepurwadarmawan@mail.ugm.ac.id

Abstract

Standardizing clinical terminology through SNOMED-CT presents a significant challenge for hospitals in Indonesia, especially in low-resource settings, owing to the limited resources available for manual mapping. This situation is especially displayed in many Indonesian hospitals, which depend on unstructured text-based medical records. This study aimed to develop an innovative automated solution utilizing OpenAI models to convert unstructured Indonesian outpatient electronic medical records into SNOMED-CT codes. The methodology involved the application of prompt engineering, including context and task, and few-shot learning techniques, to an anonymized dataset comprising approximately 1,000 unstructured Indonesian outpatient medical summary records. These records are de-identified and encompass various diagnostic scenarios, including infectious diseases, chronic conditions, and pediatric diseases. A prototype was integrated into the hospital EMR system using an HL7 FHIR to ensure its interoperability. This study will evaluate the model using standard performance metrics such as accuracy, precision, recall, F1-score, Cohen's kappa, and semantic relevance. The success criteria were as follows: (1) $\geq 85\%$ top-1 SNOMED-CT code mapping accuracy; (2) F1-score ≥ 0.82 ; (3) processing speed of over 50 clinical texts per minute; (4) strong semantic alignment verified through the SNOMED-CT hierarchy; (5) demonstrated feasibility for integration into hospital workflows; and (6) Cohen's Kappa ≥ 0.75 , reflecting substantial agreement with expert annotations. This study is expected to highlight the feasibility of leveraging OpenAI to support the standardization of clinical data in low-resource settings, with potential implications for broader AI adoption in digital healthcare transformations across Indonesia.

Keywords: OpenAI, SNOMED-CT, Clinical NLP, EMR Standardization, Healthcare Interoperability

Room 2.3 - R.8AB Tahir Building 8th Floor : Health Data Innovation and Digital Transformation

D2S1-R2-OP94

Upskilling Cadres on Digitising Integrated ANC Records (Study in Kecamatan Pakisaji, Kabupaten Malang)

Ayunda Dewi Jayanti¹, Ahmad Zaki Putra Abdillah², Aliyah Faiza Rizqillah², Arinal Haq², Fianisa Meinda Rizka², Maura Maharani Putri², Mohammad Iqbal Syarifuddin², Putri Rachma Hirtyastuti²

¹Department of Public Health and Preventive Medicine, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia

²Faculty of Medicine, Brawijaya University, Malang, Indonesia

ayunda.dewi@ub.ac.id

Abstract

Accuracy of data recording in Antenatal Care (ANC) is essential for optimum pregnancy monitoring, yet manual systems often struggle with data completeness and efficiency. This study evaluated improvements in the knowledge of cadres and midwives about integrated ANC and their perception of the ease of digital data collection using Google Forms through the KEKASIH (Kader dan Bidan Kuatkan Aksi Sukseskan Ibu Hamil) programme. A mixed methods design was used, including pre-intervention, intervention and post-intervention phases. Quantitative data on knowledge change were collected through pre- and post-tests, while qualitative insights on user experiences were gathered through in-depth interviews. A total of 42 village leaders and midwives from Pakisaji sub-district were selected using purposive sampling. Quantitative data were analysed using the Wilcoxon test and qualitative data were analysed using thematic analysis. Post-test scores showed a mean increase of 22.29% compared to pre-test scores (mean pre-test = 74.76, IQR = 30; mean post-test = 91.43, IQR = 20), with a significant difference between pre-test and post-test scores ($p=0.001$), indicating improved knowledge following the intervention. Qualitative findings showed that 14 respondents found Google Forms to be a practical and effective tool for collecting data from pregnant women compared to manual methods. The KEKASIH programme effectively improved the knowledge of cadres and midwives about integrated ANC and facilitated positive experiences with digital record keeping. Future research is needed to assess the accuracy and sustainability of digital health data recording, and its long-term impact on maternal health monitoring systems.

Keywords: Integrated ANC, digital recording, health cadres, training, Google Forms

Room 4.5 - U2.5AB Tahir Building 2th Floor: Evidence-Based Policy Action and Sustainable Green Healthcare
D2S1-R4-OP95

Enhancing Patient Safety Program in Puskesmas: Cross-Section Collaboration at Yogyakarta's DHO

Muhammad Hafiz Haunan¹

¹Health Policy and Management Program, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia.

muhammadhafizhaunan@gmail.com

Abstract:

Minister of Health Regulation No. 11 of 2017 stipulates that District Health Offices (DHO) are responsible for guiding and supervising the implementation of patient safety in Community Health Centers (Puskesmas) in Indonesia. However, studies examining how this mandate is operationalized remain limited. This study aims to explore how the Yogyakarta City DHO carries out its guidance and supervision functions in relation to patient safety, and how these influence practices at the Puskesmas level. A qualitative design with a single revelatory case study approach was employed. Data were collected from February to March 2025 through in-depth interviews with seven informants from three DHO sections and the DHO-Formed Supervisory Team for Puskesmas (TPCB), as well as through document review. The analysis used the Ecosystem for Implementation of the Global Patient Safety Action Plan 2021–2030 framework. Findings revealed that both guidance and supervision remained largely administrative and failed to address the substantive dimensions of patient safety. Oversight of incident reporting was limited to data monitoring through the Ministry of Health's online system without field verification. Guidance activities were confined to reminders to report data, while supervision of patient safety goals merely involved suggesting improved achievement rates without analyzing root causes. As a result, the reported data did not reflect actual issues, such as recurring incidents, a general increase in their frequency, and the suboptimal implementation of patient safety goals. The study also identified opportunities for cross-sectional collaboration involving the Primary Health Services Section, Quality Assurance and Improvement Section, TPCB, and other relevant units. When structured using Mintzberg's organizational framework, such collaboration could strengthen guidance and supervision functions. The study recommends establishing a formal cross-sectional coordination mechanism to improve the effectiveness of patient safety implementation at Puskesmas.

Keywords: Patient Safety, Collaboration, Cross-Section, Community Health Centers, District Health Office

Room 4.5 - U2.5AB Tahir Building 2th Floor: Evidence-Based Policy Action and Sustainable Green Healthcare

D2S1-R4-OP96

Toward Carbon-Neutral Hospitals: A Systematic Review of Policy Instruments and Green Health Infrastructure in Asia-Pacific Countries

Andang Evrilianto¹, Hermawan Saputra² Sheila Rizkia Anjari³

¹Department of Health Policy Administration, Public Health Faculty, University of Indonesia, Indonesia

²Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta, Indonesia

³Department of Health Policy Administration, Public Health Faculty, University of Indonesia, Indonesia

andang.evrilianto@ui.ac.id

Abstract:

As the healthcare sector contributes significantly to global carbon emissions, achieving carbon-neutral hospitals has become a critical goal for sustainability. This systematic literature review explores the policy instruments and green health infrastructure strategies implemented across Asia-Pacific countries to support the transition of hospitals toward carbon neutrality. The objective is to identify and assess the effectiveness of policies, frameworks, and green initiatives that contribute to reducing the environmental impact of healthcare systems. A comprehensive search of literature published between 2015 and 2025 was conducted using major databases such as Scopus, PubMed and Science Direct. Articles were selected based on their relevance to the implementation of renewable energy, waste management, sustainable building practices, and eco-friendly hospital operations. Results show that while several countries in the region have adopted important green initiatives, such as solar energy solutions, waste-to-energy systems, and sustainable building designs, challenges persist in the form of inconsistent regulatory frameworks and limited resources. Key barriers include insufficient funding, lack of training for healthcare professionals on sustainability, and fragmented policy coordination. The review concludes that achieving carbon-neutral hospitals in Asia-Pacific will require stronger evidence-based policies, enhanced financial incentives for green initiatives, and regional cooperation to foster best practices. Policymakers are urged to prioritize the integration of sustainability into healthcare systems, invest in green infrastructure, and provide training to ensure long-term environmental and economic benefits.

Keywords: Carbon-Neutral Hospitals; Sustainable Healthcare; Environmental Policy; Asia-Pacific Healthcare

Room 4.5 - U2.5AB Tahir Building 2th Floor: Evidence-Based Policy Action and Sustainable Green Healthcare

D2S1-R4-OP98

The Advantages and Challenges of Teleophthalmology Practice in Underserved Population and in Low and Middle Income Countries: A Scoping Review

Muhammad Asroruddin^{1,2}, Muhammad Bayu Sasongko², Lutfan Lazuardi²

¹Master Student of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Indonesia

²Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Indonesia

asroruddin@medical.untan.ac.id

Abstract

Teleophthalmology provide eyecare to the underserved population, and give advantages to people in low and middle income countries (LMICS). It is evidently as reliable, cost-effective, time-saving, and efficient. This review is aimed to assess the advantages and challenges of practicing teleophthalmology in underserved populations and in low and middle income countries. The PRISMA statement was used for reporting data in this scoping review. A comprehensive search was performed using Cochrane Library, PubMed, and Science Direct databases, limited to articles published in English from 2015 to 2025. Search terms included “teleophthalmology” and “eyecare”. Data screening was used initially through keywords, titles, and abstracts. Finally, relevant articles were selected for inclusion by reviewing the full texts of eligible studies. A total of 62 potentially relevant articles were identified from PubMed (9), Cochrane Library (27), and Science Direct (26). After removing 3 duplicate articles, 59 articles were available for title and abstract screening. Further screening was performed, and finally, the remaining 10 articles were eligible. The rest were excluded due to some requirements such as limited access articles, and unmet inclusion criteria. Several studies have confirmed the advantages of teleophthalmology in underserved populations even in USA, and also benefits in low and middle income countries such as India, Iran, and in African region. It was reliable, cost-effective, time-saving, and efficient to provide eyecare. Many studies have suggested the need for system improvement. In conclusion, teleophthalmology is the effective and efficient tool to deliver eyecare in underserved and in low resource areas.

Keywords: telemedicine, teleophthalmology, eyecare

Room 4.5 - U2.5AB Tahir Building 2th Floor: Evidence-Based Policy Action and Sustainable Green Healthcare

D2S1-R4-OP100

Evaluation of Primary Health Care Integration Implementation at Nirunmas District Health Center, Tanimbar Islands Regency

Renghart Feninlambir¹, Mubasyir Hasanbasri², Likke Prawidya Putri³

¹Health Policy and Management, Universitas Gadjah Mada, Yogyakarta, Indonesia.

²Department of Biostatistics, Epidemiology, and Population Health, Universitas Gadjah Mada, Yogyakarta, Indonesia.

³Department of Health Policy and Management, Universitas Gadjah Mada, Yogyakarta, Indonesia.

renghartfeninlambir@ugm.ac.id

Abstract

Primary health care plays a crucial role in improving health status in Indonesia. However, its performance remains suboptimal in addressing preventable disease burdens. To overcome this, the Indonesian government introduced the Primary Health Care Integration (ILP) initiative, aiming to strengthen access to promotive, preventive, curative, and rehabilitative services through a life-cycle approach, particularly in disadvantaged regions. This study evaluates the ILP implementation at Nirunmas District Health Center, Tanimbar Islands Regency, a designated disadvantaged area. A qualitative case study approach was used involving 17 key informants. Data were collected through in-depth interviews and document reviews, and analyzed through data reduction, coding, categorization, and narrative presentation. Three main findings emerged. First, the organizational structure and service flow at Tutukembong and Waturu Health Centers have shown improved integration, though the standardization of service packages remains suboptimal. Second, the digital-based recording and reporting system has not operated effectively, encountering challenges in data utilization and inter-unit integration. Third, ILP implementation faced barriers, including shortages of human resources, inadequate infrastructure, and weaknesses in the health information system. The study emphasizes the urgent need for targeted strategies to enhance ILP implementation in disadvantaged areas by strengthening human resource capacity, upgrading infrastructure, and optimizing digital health information systems.

Keywords: Primary Health Care Integration, Health Service Delivery, Digital Health Recording System, Implementation Barriers, Disadvantaged Area.

**POSTER PRESENTATION
DAY 2 : 18TH JUNE 2025 (WEDNESDAY)**

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

D2S2-R1-PP2

Translation, Cross-Cultural Adaptation, and Validation of the Patient Participation Questionnaire (PPQ) into the Malay Language

Siti Norhani Mazrah binti Khalid¹

¹Universiti Kebangsaan Malaysia

drsitinorhani@gmail.com

Abstract

Patient participation is crucial for patient safety and promoting collaboration in healthcare decisions. The Patient Participation Questionnaire (PPQ) is a tool intended to assess the degree of patient participation in their care, but its reliability and relevance need validation. This study aims to translate and validate the PPQ into Malay for the Malaysian context, considering the country's unique healthcare landscape. The original PPQ in English was translated into Malay. A back-to-back translation of the questionnaire was performed by two language experts, proficient in both English and Malay, ensuring that the translated version retained the original meaning and intent of the instrument. Six patient safety experts assessed the content validity of a questionnaire according to relevance, clarity, simplicity, and ambiguity. The face validation was conducted among 10 discharged patients. The quantitative data was analyzed to assess the instrument's internal consistency and reliability. The results of the validation process revealed valuable insights into the suitability of the PPQ-Malay for the Malaysian context. The mean I-CVI exceeded the acceptable threshold, with values of 0.93 for relevance and clarity and 0.89 for simplicity and ambiguity. The scale-content validity index surpassed 0.86, signifying a robust consensus among experts concerning the instrument's validity. The overall face validity index was 0.94. The internal consistency reliability, measured by Cronbach's Alpha, was 0.853. These findings suggest that the PPQ-Malay, with minor modifications to the identified items, is a reliable and valid tool for assessing patient participation in the Malaysian healthcare setting. Further testing on the PPQ-Malay version in other settings in Malaysia needs to be done for cross-validation.

Keyword: patient participation, patient safety, translation, validation

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

D2S2-R1-PP3

Key challenges and strategies for humanitarian response in Sudan: An analysis of the scope of need in the present crisis and recommendations for future action

Campbell M. Loi¹, David Polatty²

¹ Brown University School of Public Health

¹ Brown University, Watson Institute for International and Public Affairs

campbell_loi@brown.edu

Abstract

Sudan is currently facing one of the largest humanitarian crises in recent history. Though the nation has been plagued for decades by political instability, the current conflict began in April 2023 with shootings breaking out between the nation's two rival military groups — the Sudanese Armed Forces, or SAF, and the Rapid Support Forces, or RSF — in an intense power struggle. As the fighting enters its second year, there remains an urgent need for further action.

An extensive review of current data and literature has identified three key sectors of Sudan's humanitarian ecosystem that possess significant needs or show major gaps in aid delivery: health and medical, protection, and humanitarian access. In the health and medical sector specifically, heavy rains and flooding, malnutrition, and a collapsing health system and surveillance infrastructure present the most significant challenges. Protection concerns are mostly related to women and aid workers, with widespread reports of gender-based violence, mass killings, potential ethnic cleansing, and targeting of healthcare facilities and workers as military strategies. Strategies to address the described areas of need and gaps in aid delivery should include: enhancing surveillance measures through community-based surveillance programs and the use of satellite and drone technologies; strengthening local infrastructure by leveraging community health workers and new treatment delivery and monitoring technologies, improving access to internet connectivity, and adapting to better withstand climatic hazards such as floods; and improving the protection of civilians and aid workers through increased communication with local actors.

Keywords: Sudan, conflict, humanitarian response, disaster health management

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

D2S2-R1-PP4

Double Burden of Infection and Sociodemographic Disadvantage among Men Who Have Sex with Men Living with HIV in Surakarta, Indonesia

Yeny Ristaning Belawati¹*

¹Doctoral Program on Public Health, Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Indonesia

belawatiyeni@gmail.com

Abstract

Men who have sex with men (MSM) living with HIV often face a double burden of infection, carrying not only the weight of HIV but also an elevated risk of acquiring other sexually transmitted infections (STIs). This study explores both behavioral and sociodemographic vulnerabilities that contribute to this burden. A cross-sectional survey was conducted among 50 MSM living with HIV in Surakarta, recruited through snowball sampling due to the challenges of accessing this stigmatized and hard-to-reach population. Ethical approval was obtained from the institutional review board, and informed consent was obtained from all participants. Descriptive and bivariate analyses were performed using Stata. Most participants had low education and income levels, reflecting the broader socio-economic marginalization often experienced by this population. These factors, compounded by stigma, may limit access to information, secondary preventive services, and timely treatment. Bivariate analysis revealed a significant association between anal sex preference and reported STI history. These findings underscore the urgency of integrated public health strategies that address sexual behavior, socio-economic vulnerabilities, and stigma. Holistic, community-based interventions are essential to reduce the burden of co-infection and to sustain the health and well-being of MSM living with HIV.

Keywords: men who have sex with men, secondary prevention, sociodemographic, sexual health

Room 1 - Auditorium FKKMK : Resilient Integrated Health Systems through Sustainable Financing

D2S2-R1-PP7

Analysis of Pending Claims in 2024 Neurosurgical Cases and Their Impact on Hospital Financing at RS LMC under the National Health Insurance

Nurmarani Fatin Hafifatin¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

ranifatin20@gmail.com

Abstract

The increasing number of pending claims in neurosurgical cases has raised concerns regarding the sustainability of financial management at RS LMC within the framework of the National Health Insurance (JKN) system. This study aims to analyze the causes of pending claims in neurosurgical cases throughout 2024, during which 53 patients experienced delays in claim payments each month. A retrospective descriptive method was used through a review of claim submission data, interviews with claims officers and coders, and analysis of medical records from January to December 2024. The results show that 62% of pending claims were due to incomplete medical records, 26% due to discrepancies in diagnosis and procedure coding, and 12% due to administrative errors during claim submission. These delays have disrupted cash flow and caused financial instability at the hospital, impacting the quality of services provided. Based on this analysis, RS LMC has set a target for 2025 to eliminate pending claims in neurosurgical cases by improving medical record documentation, conducting intensive training for coders, and strengthening coordination between clinical and administrative units. Addressing pending claims is a crucial step to reinforce hospital resilience and ensure sustainable health financing in line with universal health coverage goals. These findings indicate that pending claims in neurosurgical cases represent not only an administrative barrier at the hospital level but also reflect structural challenges within the National Health Insurance (JKN) system, particularly regarding the implementation of the INA-CBGs payment scheme for complex cases. Therefore, policy integration between hospitals, the Health Insurance Administration Agency (BPJS Kesehatan), and national regulators is essential to strengthen claims management systems, accelerate verification processes, and improve transparency and efficiency in health financing. This analysis is aligned with the direction of national health system reform, which emphasizes service digitalization, financing efficiency, and the strengthening of hospital governance as a strategic service provider within the JKN framework.

Keywords: pending claims, neurosurgery, hospital financing, JKN, system resilience

Room 1 - Auditorium FKMK : Resilient Integrated Health Systems through Sustainable Financing

D2S2-R1-PP8

Transforming Pediatric Care: Assessing the Impact of Integrated One-Stop Service on Health System Resilience at JIH Hospital Yogyakarta

Ratih Fitriani¹, Cita Aulia Nisa¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

drcitaaulianisa@mail.ugm.ac.id

Abstract:

Transformation of healthcare services are important especially for hospitals, because healthcare providers should always be ready to adapt, and survive from challenges of health system resilience while ensuring total quality services to the community. One of the challenges that emerged for JIH Hospital Yogyakarta was the increasing demand for pediatric healthcare services. Fragmented pediatric services often lead to inefficiencies, and decreased parental satisfaction. In response for the issues, JIH Hospital Yogyakarta offering one-stop integrated pediatric services in the Pediatric Tower to combine outpatient and inpatient care with laboratory and pharmacy services as well as a mini zoo recreational facility into one service center to improve efficiency and quality of service by establishing the JIH Children Care Center. This study aims to assess how the implementation of the Integrated One-Stop Service contributes to strengthening the resilience of the hospital's health system, particularly in pediatric services. A comparative quantitative descriptive study analyzed operational data and parental satisfaction survey results collected before and after service implementation measured by indicators of health system resilience: service time, parental satisfaction, and patient visit volume. The results showed an increase in faster service response speed, parental satisfaction scores, and patient visit volume. These findings support that the one-stop integrated health service model is important to strengthen long-term health system resilience. This one-stop integrated service model initiative is an innovation model that has the potential to be applied more widely to encourage greater health coverage and improve overall public health.

Keywords: Integrated One-stop service, pediatric care, health system resilience, parental satisfaction, operational efficiency.

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

D2S2-R2-PP9

Association between Financial Health and Mental Health Outcomes among a General Population of Adults in a Peri-Urban Community in Thailand

Wit Wichaidt^{1*}

¹ Department of Epidemiology, Faculty of Medicine, Prince of Songkla University, Hat Yai, Thailand
wit.w@psu.ac.th

Abstract

The objective of this study is to assess the extent to which financial health is associated with depression and anxiety. The investigator conducted a cross-sectional study at a municipality in Southern Thailand using self-administered questionnaires. The investigator considered a person with at least 15,000 THB (7 million IDR) in personal monthly income with 5,000 THB in emergency savings to be financially healthy. Income was not a criterion for those over the retirement age (60 years). The investigator considered those with PHQ-2 score ≥ 3 points and GAD-7 score ≥ 10 points to have potential depression and potential anxiety, respectively. Participants returned 1,112 of the 1,115 distributed questionnaires. Approximately 24% of participants were financially healthy, and 5% and 3% of the participants had potential depression and anxiety, respectively. Participants who were financially healthy had a lower prevalence of potential depression than those who were not financially healthy (2% vs. 7%; Adjusted OR = 0.26; 95% CI = 0.06, 1.16). The negative association between being financially healthy and potential depression seemed stronger among those aged 60 and under (<1% vs. 6%; Adjusted OR = 0.16; 95% CI = 0.02, 1.23) than among those aged 61 years and over (6% vs. 10%; Adjusted OR = 1.02; 95% CI = 0.10, 10.82). The study offered basic information on a potential determinant of mental health issues that warrants further investigation. However, the lack of statistical significance and potential selection & information biases should be considered caveats in the interpretation of the study findings.

Keywords: Mental Health, Economy, Inequalities, Financial assistance

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

D2S2-R2-PP43

Enhancing Toothbrushing Timing Through Community-Based Oral Health Interventions: A Systematic Review

Echi Febriyani FN¹

¹Department of Health Policy and Management; Faculty of Medicine, Public Health and Nursing; Universitas Gadjah Mada, Yogyakarta, Indonesia

echifebriyani2018@mail.ugm.ac.id

Abstract

Oral health is a fundamental component of overall health and well-being, yet dental caries remains the most prevalent noncommunicable disease worldwide, affecting people across all age groups and socioeconomic backgrounds. This condition imposes not only clinical challenges but also a significant economic burden, with global costs estimated at 442 billion US dollars annually. Although international guidelines recommend brushing teeth at least twice a day, particularly after meals and before bedtime, adherence to the correct timing of toothbrushing remains low. In Indonesia, for instance, 72.5 percent of the population reports brushing twice daily, but only 6.2 percent do so at the recommended times, indicating a gap between brushing frequency and preventive effectiveness. Toothbrushing is recognized as the most accessible and cost-effective method to prevent oral diseases, and improving both its frequency and timing is essential for reducing oral health risks. Community-based interventions have shown potential in promoting proper oral hygiene practices through educational, participatory, and empowerment strategies tailored to community needs. This systematic review aims to evaluate the effectiveness of community-based oral health interventions in improving the timing of toothbrushing. Following the PRISMA 2020 guidelines, the review will include studies published between 2015 and 2025, sourced from Scopus, PubMed, ScienceDirect, and the Cochrane Library. Eligible studies will focus on community-driven programs targeting behavior change in general populations. Data will be analyzed to identify intervention strategies, particularly those with educational and participatory approaches, that have been successful in encouraging timely toothbrushing. The findings are expected to contribute to the development of more effective, community-centered oral health promotion efforts and support evidence-based policymaking that addresses behavioral gaps in oral hygiene practices.

Keywords: toothbrushing timing, community engagement, oral health, community-based intervention, health promotion

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

D2S2-R2-PP13

Contraceptive Knowledge and Attitudes in Malaysia's Urban Poor: A Community-Based Assessment

Siti Hajar Adam¹, Nur Adnin Ahmad Zaidi¹, Siti Athirah Zafirah Abdul Rashid¹, Nor Faiza Mohd Tohit¹, Wan Farizatul Shima Wan Ahmad Fakuradzi¹, Badrul Hisham Abd Samad¹

¹Faculty of Medicine and Defence Health, Universiti Pertahanan Nasional Malaysia, 50300, Kuala Lumpur

athirahzafirah@gmail.com

Abstract

Health empowerment through informed contraceptive choices is essential in improving maternal and child health outcomes, particularly in underserved, urban poor communities. In Malaysia, limited reproductive health knowledge and restricted access to contraception among low-income populations have been linked to increased rates of unintended pregnancies and maternal mortality. This study aimed to explore the relationship between sociodemographic factors and levels of knowledge and attitudes toward contraceptive use among residents of Program Perumahan Rakyat (PPR) in Sungai Besi, Kuala Lumpur.

Using a cross-sectional design, 253 adult participants were recruited via convenience sampling and completed a validated self-administered questionnaire. The survey assessed sociodemographic variables (gender, age, income, education, employment, number of children) and their associations with contraceptive knowledge and attitude scores, analyzed using Chi-square and Pearson's correlation tests.

Results revealed that participants with tertiary education, formal employment, and household incomes above RM3000 demonstrated significantly better knowledge and more positive attitudes toward contraception ($p < 0.05$). Ethnic background was also a significant factor; respondents of Chinese ethnicity had the highest mean knowledge score ($M = 12.8$, $SD = 3.1$), while Malay participants showed more favorable attitudes ($M = 42.6$, $SD = 5.7$). Interestingly, males reported higher knowledge levels ($M = 11.9$, $SD = 3.5$) compared to females ($M = 10.2$, $SD = 3.8$), whereas females expressed more favorable attitudes toward contraceptive use ($M = 41.2$, $SD = 6.0$).

These findings highlight the necessity of targeted, culturally sensitive community education programs that address both informational gaps and sociocultural influences. By integrating community engagement and empowerment strategies, particularly in urban poor settings, public health efforts can more effectively reduce reproductive health inequalities, promote informed contraceptive decisions, and ultimately improve long-term maternal and family health outcomes.

Keywords: Contraception, Knowledge, Attitude, Urban poor, Reproductive health

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

D2S2-R2-PP49

Igniting Youth Potential for Volunteering in Posyandu/Posbindu's Public Health Programs

Okatiranti Okatiranti¹, Upik Rahmi², Desy Nuryunarsih³, Eva Supriatin⁴, Anngi Sahputra¹, Ade Mubarak¹

¹Universitas Adhirajasa Reswara Sanjaya

²Universitas Pendidikan Indonesia

³University of Newcastle

⁴Stikep PPNI Jawa Barat

okatiranti@yahoo.com

Abstract

Youth involvement is crucial for sustaining community health programs such as Posyandu and Posbindu. However, a recent qualitative study in a district of Bandung indicated that fewer young people are interested in becoming community health workers (CHWS), largely due to low remuneration. Therefore, understanding the perspectives of youth on participating in community health programs, particularly from the viewpoint of community members involved in Posbindu, is essential. This study explored community perceptions of youth volunteering after involving young people aged 15–20 years, members of the youth organisation Karang Taruna, in training sessions measuring blood pressure and blood glucose. The training was conducted alongside senior CHWS, after which the youth served as elderly navigators at the Posbindu. Using semi-structured interviews with 14 participants, including six CHWS, four young people, three older adults, and one head of a neighbourhood unit, data were collected remotely via WhatsApp video calls, each lasting 45–60 minutes. Participants were assured of confidentiality and anonymity, and all data were stored securely in password-protected files accessible only to the research team. Reflexive Thematic Analysis developed four key themes: scheduling conflicts as students, shifting volunteer motivation, the role of prior experiences, and the redefinition of volunteer capacities. Youth involvement in community health programs has shifted significantly, driven by scheduling conflicts with academic commitments, a more pragmatic orientation toward volunteering, and growing community expectations for IT proficiency in reporting activities. Early exposure to community engagement, often facilitated by family members acting as local leaders, remains critical in fostering youth participation. Strengthening collaboration between youth organisations and CHW programs offers a promising strategy to enhance youth engagement in community health efforts.

Keywords: Community Health Workers; Youth; Posyandu; Volunteering; Motivation

Room 2 - R.8A Tahir Building 8th Floor : Community-Centered Health and Health Workforce Promotion

D2S2-R2-PP16

Strengthening Community Health Outcomes through Corporate Social Responsibility Philanthropy Programs: Effects on the Developmental Scales of Children with Special Needs Undergoing Multidisciplinary Therapies at Grha Husada Hospital in 2024

Koes Maureen Yoshinaga¹

¹Grha Husada Hospital, Gresik

²Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University

momo.yoshinaga.kmy@gmail.com

Abstract:

This study investigates the impact of Corporate Social Responsibility philanthropy programs to improving developmental outcomes in children with special needs at Grha Husada Hospital in 2024. The hospital features a specialized Child Growth and Development Clinic and Special Needs Program, offering multidisciplinary therapies. Through a CSR partnership with a corporate sponsor, therapy sessions were fully subsidized for children from low-income families, selected through medical referral and socioeconomic screening. Over six months, participants underwent various therapies: 6 children received physiotherapy, 8 behavioral therapy, 7 speech therapy, and 5 occupational therapy. All children demonstrated measurable developmental improvement, with only a few criteria in certain domains remaining unchanged. Therapy outcomes were monitored using pre- and post-intervention assessments with the Denver II developmental screening tool, capturing progress across personal-social, fine motor, language, and gross motor areas. The findings reinforce the value of CSR-funded interventions in enhancing child development, particularly when therapy access is otherwise financially constrained. This study highlights how CSR initiatives, when aligned with pediatric rehabilitation services, can effectively reduce health disparities and support sustainable, community-centered health outcomes.

Keywords: Corporate Social Responsibility Philanthropy; Children with Special Needs; Multidisciplinary Therapy; Developmental Outcomes; Community Health Promotion

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
D2S2-R3-PP18

The Analysis of Health Facility Coverage Radius Mapping in Palu City, Central Sulawesi Province

Renata Gita Cahyani Sese¹

¹Health Policy and Management Study Program, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University
renatagitacahyanis@gmail.com

ABSTRACT

The equitable availability of healthcare facilities plays a vital role in supporting public health, particularly in rapidly growing urban areas. In Palu City, Central Sulawesi Province, the increasing population has led to a higher demand for healthcare services and the need to assess the spatial distribution of these facilities. This study aims to analyze the distribution and service radius of healthcare facilities in Palu using a Geographic Information System (GIS)-based approach, utilizing spatial analysis methods including buffer and overlay techniques. The study relied on secondary data such as administrative boundaries, settlement patterns, and locations of healthcare facilities. The results reveal that the distribution of healthcare facilities in Palu is dispersed rather than centralized, showing a relatively even presence across the city's districts. Districts such as East Palu, Mantikulore, and South Palu have a higher concentration of healthcare facilities, especially in residential areas, while districts like North Palu, Ulujadi, and Tawaeli are less well-served. Based on the Indonesian National Standard (SNI No. 03 – 1733 – 2004), the ideal service radius for healthcare access is set at 3,000 meters. Applying this standard, districts such as Palu Timur, Mantikulore, Palu Barat, and Palu Selatan meet the criteria for accessible healthcare, while Ulujadi and Palu Utara are categorized as having limited accessibility. Despite the overall balanced distribution, certain areas still experience gaps in access, indicating a need for targeted policy interventions. The findings underscore the importance of using spatial analysis in urban health planning to identify underserved communities and improve equitable access to health services. In conclusion, while most residential areas in Palu City benefit from adequate access to healthcare facilities, addressing the shortfalls in certain districts is crucial to achieving comprehensive and inclusive healthcare coverage citywide.

Keywords: Accessibility, Spatial analysis, Health facilities, Reachability.

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
D2S2-R3-PP20

**Accelerating Pharmacy Services Through Digitalization and Automated Dispensing Systems:
A Digital Transformation Initiative for Pharmacy Services in Hospital Setting**

Cita Aulia Nisa¹, Ratih Fitriani¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

drcitaaulianisa@mail.ugm.ac.id

Abstract

The transformation through digital innovation has gained momentum in optimizing business process including in healthcare services. In the era of digitalization, enhancing services by improving quality while maintaining operational efficiency has become crucial. Prolonged pharmacy waiting times are a persistent challenge in hospital services, impacting patient satisfaction and overall healthcare delivery efficiency. In response to this, digital transformation initiatives such as teleconsultation systems and pharmacy automatization are increasingly adopted to streamline processes and enhance service quality. This study aims to assess the impact of implementing an automatic dispensing machine for compounding powdered medications and integrating digital services such as teleconsultation and electronic prescribing (e-prescribing) in outpatient pharmacy services. This seamless digital integration aims to minimize manual handling, reduce human error, and substantially accelerate the medication preparation and dispensing time.

A comparative observational study was conducted pre- and post-implementation at a secondary private hospital in Indonesia. Time-to-dispense, customer satisfaction, complaint rates, and human resource efficiency were measured. Preliminary internal evaluation showed a marked reduction in average waiting times and a positive shift in patient satisfaction scores. Additionally, pharmacy staff productivity increased as manual compounding tasks were reduced, allowing resource reallocation towards patient-centred services. These findings support the hypothesis that health data innovation and digital transformation strategies contribute to sustainable healthcare systems by enhancing operational efficiency and improving patient experience.

Keywords: Hospital Digital Transformation, Automatic Dispensing, Pharmacy Automatization, Teleconsultation, e-prescribing

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
D2S2-R3-PP21

Hospital Management Perspectives on Cybersecurity Compliance of Indonesia's EMR Vendors with Permenkes Nomor 24 Tahun 2022: Developing a Prototype Audit Checklist

Yuni Astuti¹

¹Department of Health Policy Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

yuniastuti1996@mail.ugm.ac.id

Abstract

Indonesia's digital health transformation has led to the registration of 1,057 electronic medical record (EMR) products on SATUSEHAT as of May 2025, including 415 hospital information systems (HIS). Ensuring cybersecurity compliance with Article 22 of Permenkes Nomor 24 Tahun 2022, which mandates confidentiality, integrity, and availability (CIA) of EMR data, remains a critical challenge for hospital management. This study will explore how hospital management and IT leadership perceive, implement, and oversee cybersecurity compliance of HIS vendors within Indonesian hospitals. Using a purposive sampling approach, the study will conduct semi-structured interviews with hospital IT managers and relevant stakeholders across diverse geographic regions and hospital types. Document reviews of cybersecurity policies, vendor contracts, and audit reports will supplement the qualitative data. The research will use thematic analysis to identify governance practices, challenges in vendor management, data sharing protocols, and incident response mechanisms related to cybersecurity compliance. Secondary data sources, such as publicly available vulnerability reports and regulatory audits, will contextualize management perspectives. The expected outcome is a prototype audit checklist tailored to hospital management's role in monitoring vendor cybersecurity compliance, aligned with Article 22 of Permenkes Nomor 24 Tahun 2022. This checklist aims to support hospitals in strengthening governance frameworks, ensuring effective vendor oversight, and enhancing data protection. Findings from this study will provide actionable recommendations to improve hospital cybersecurity governance and contribute to the advancement of Indonesia's digital health ecosystem under SATUSEHAT.

Keywords: EMR Compliance, Hospital Management, Permenkes Nomor 24 Tahun 2022, Cybersecurity Governance, Digital Health Transformation, Audit Checklist

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
D2S2-R3-PP22

Evaluation of Hospital Management Information System (HMIS) Implementation at Prof.Dr.R. Soeharso Orthopedic Hospital Surakarta Through the Hot-Fit Method

Oliva Prasastin¹, Anggi Napida², Wahid Salman³

¹Health Administration Department, Univesity of Kusuma Husada Surakarta

²Hospital Administration Department, Univesity of Kusuma Husada Surakarta

³Hospital Management Information System, Soeharso Orthopedic Hospital

OlivaPrasastin@gmail.com

Abstract:

The implementation of hospital information systems (HMIS) is essential for improving the efficiency and effectiveness of health service management. At Prof. Dr. R. Soeharso Orthopedic Hospital Surakarta, a transition from a third-party system to an internally developed HMIS required health workers to adapt to new processes and workflows. This study evaluates the impact of this system migration by examining three critical aspects: human, organizational, and technological factors. Using a cross-sectional design, data were collected through questionnaires from 29 health workers involved in HMIS usage, complemented by in-depth interviews with the IT team and programmers who participated in the system development. The aim was to assess how the new HMIS system influences the effectiveness and efficiency of health service delivery. T-test analysis showed significance values of 0.000 for both human and organizational aspects, and 0.048 for the technological aspect—all below the threshold of 0.05. These results indicate that each of these factors significantly influences the successful implementation of the HMIS. The study highlights the importance of health workers' adaptability, supportive organizational structure, and robust technological infrastructure in achieving a smooth system transition. The findings offer practical insights into the dynamics of HMIS adoption and can serve as guidance for future system optimization and implementation in similar healthcare settings.

Keywords: Evaluation, Hot-Fit, HMIS

Room 3 - R.8B Tahir Building 8th Floor : Health Data Innovation and Digital Transformation
D2S2-R3-PP23

Comparative Analysis of Patient Safety Incident Reporting Systems Based on Technology at UGM Academic Hospital, Indonesia and University of Tsukuba Hospital, Japan: Implications for Strengthening Patient Safety Culture

Mentari Riauana¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health and Nursing; Universitas Gadjah Mada, Yogyakarta, Indonesia
mentaririauana@mail.ugm.ac.id

Abstract:

Patient safety incident reporting systems are critical tools to enhance the quality and safety of healthcare services. This qualitative comparative study examines the implementation of technology based incident reporting systems at two academic hospitals: Rumah Sakit Akademik Universitas Gadjah Mada (RSA UGM) in Indonesia and University of Tsukuba Hospital in Japan. The study aims to explore how technological integration supports the effectiveness of reporting systems and contributes to the development of patient safety culture within each institution. The study relies solely on primary data, collected through semi-structured interviews and document analysis at both hospitals. Participants will be selected based on the following inclusion criteria: (1) healthcare staff directly involved in patient safety or incident reporting; (2) at least one year of professional experience in the hospital; and (3) willingness to participate through informed consent. Thematic analysis will be employed to identify key patterns, enabling a comparative assessment of technological use, staff engagement, and cultural dynamics influencing reporting behavior. It is anticipated that RSA UGM's system will demonstrate strengths in accessibility and early adoption, yet encounter barriers related to staff compliance and consistent incident reporting. Conversely, the University of Tsukuba Hospital may benefit from more mature, structured digital systems, but still face challenges such as underreporting due to hierarchical culture and fear of blame. The findings are expected to reveal that while technological systems significantly facilitate the reporting process, they do not independently ensure a strong patient safety culture without corresponding cultural and organizational change. This study will propose technology-enabled and culturally responsive frameworks to optimize incident reporting practices and promote sustainable improvements in patient safety across academic hospital environments.

Keywords: Patient Safety, Incident Reporting, Health Technology, Qualitative Study, Indonesia, Japan, Safety Culture

Room 4 - U2.5A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D2S2-R4-PP26

Effectiveness of a TPB-Based Educational Intervention in Improving Attitudes, Norms, and Behavioral Control Toward Patient Safety Behaviors among Public Hospital Nurses

Nor Hanizah Abdul Gapa¹, Aniza Ismail², Aidalina Mahmud³

¹ University Putra Malaysia

² Department of Public Health Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia

³ Department of Community Health, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia.

norhanizah@moh.gov.my

Abstract

Malaysian public hospitals face ongoing challenges in promoting patient safety behaviors among nurses. Despite national efforts like the Malaysian Patient Safety Goals (MPSG), there is persistent underreporting, poor communication, and fear of speaking up, which are key indicators of a weak patient safety culture. Currently, there is no structured educational module specifically designed to improve safety-related behaviors among nurses. Hence, a theory-based intervention is needed to support nurses and overcome these behavioral challenges in a way that suits the local healthcare setting.

This study aims to develop, implement, and evaluate a Theory of Planned Behavior (TPB)-based educational module to improve safety-related attitudes, norms, and behavioral control among nurses in the medical wards of two Malaysian public hospitals.

A single-blinded, two-arm cluster randomized controlled trial will be conducted involving 120 full-time nurses from the medical wards of Hospital Putrajaya (intervention group) and Hospital Sungai Buloh (control group). The intervention group will receive a structured educational module based on the Theory of Planned Behavior (TPB), targeting safety-related attitudes, subjective norms, and perceived behavioral control. The module will be delivered via blended-learning method. The control group will receive a general health education module unrelated to patient safety. Outcomes will be measured at baseline, then 3 months, and 6 months post-intervention, using validated TPB questionnaires and the Hospital Survey on Patient Safety Culture (HSOPSC). Data will be analyzed using Generalized Estimating Equations (GEE) to account for clustering and assess changes over time.

The intervention is expected to improve safety-related attitudes, norms, and perceived behavioral control among nurses, along with positive changes in selected dimensions of patient safety culture. Findings may offer practical evidence to support theory-based educational interventions that strengthen safety-related behaviors and contribute to enhancing patient safety culture in Malaysian public hospitals.

The intervention is designed to improve safety-related behaviors among nurses through changes in attitudes, subjective norms, and perceived behavioral control. Applying the Theory of Planned Behavior provides a clear framework for addressing key behavioral factors and may support broader efforts to strengthen patient safety culture in public hospitals.

Keywords: patient safety behaviors, Theory of Planned Behavior, nurses, educational intervention, safety culture

Room 4 - U2.5A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D2S2-R4-PP27

Cognitive Impairment in Chronic Kidney Disease: Prevalence and Contributing Factors – Preliminary Findings

Ching Ching Hii¹, Aznida Firzah Abdul Aziz¹, Mohd Fairuz Ali¹, Teh Rohaila Jamil¹, Muhammad Yusuf Bin Abu Shamsi²

¹Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia

²Department of Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia

hiichingching09@gmail.com

Abstract

Chronic kidney disease and cognitive impairment are both significant global health issues. It is increasingly recognized that individuals with chronic kidney disease (CKD) are at higher risk of developing cognitive impairment compared to general population. Our aim is to evaluate the prevalence and associated factors of cognitive impairment in chronic kidney disease. This is a cross-sectional study that involved 86 CKD patients (stages 3A-5) attending Lanang Health Clinic, Sarawak. Sociodemographic characteristics and clinical parameters were collected, followed by cognitive evaluation using the Montreal Cognitive Assessment test (MoCA) administered by trained medical personnel. A local validated cut-off score of 18 was applied to differentiate between normal cognition and cognitive impairment. The overall prevalence of cognitive impairment among CKD patients was 38.4%, with significant variation across CKD stages: 30.4% in stage 3A, 53.8% in stage 3B, 42.9% in stage 4, and 100% in stage 5. Median eGFR was lower (45 vs 51 ml/min/1.73m²) in cognitive impaired patients ($p=0.042$). Bivariate analysis identified eGFR, female gender, lower education and diabetes mellitus as significant factors. Following multivariate logistic regression analysis, lower education level (AOR=3.103, 95% CI 1.206-7.982, $p=0.019$) and presence of diabetes mellitus (AOR=3.213, 95% CI 1.035-9.978, $p=0.043$) remained significantly associated with cognitive impairment. The final model showed good fit ($X^2(2)=11.144$, $p=0.004$). In conclusion, cognitive impairment affects over one-third of CKD patients. Patients with lower education or diabetes mellitus had 3 times higher odds of having cognitive decline. Given the high burden, routine cognitive screening should be integrated into CKD stage 3A to 5 management.

Keywords: Chronic kidney disease, cognitive impairment, MoCA, primary care, screening

Room 4 - U2.5A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D2S2-R4-PP29

Strengthening Hospital Workforce Resilience through a One Health Lens: Evidence-Based Pathways for Sustainable Human Resource Policy in Private Healthcare

Nita Kristiani¹, Maria Silvia Merry²

^{1,2}Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia. Email: candra.chpm@gmail.com

joanna.kristiani@gmail.com

Abstract:

Health worker play a critical role in maintaining the functionality of the health system, although health worker often experience high vulnerability from physical fatigue, psychological stress, and unsupportive work environments. In private hospital settings such as in Surakarta, the human resource dilemma is not only about workforce availability, but also about ensuring health workers wellbeing, which is essential to maintain high-quality patient care. The **One** Health framework, when applied with an evidence-based approach, offers a powerful perspective to address these challenges by connecting individual health with the work environment and broader ecological considerations.

This study investigates how One Health principles can guide Human resource team to have strategies to foster a healthier and more sustainable workforce. This study using a qualitative case study approach, we collected insights from in-depth interviews with clinical staff and direct observational assessments of their working conditions. Our preliminary results suggest chronic occupational stress, lack of the green or restorative space, and the limited presence of structured psychosocial support significantly contribute to burnout and performance decline.

Based on these findings, we propose targeted policy recommendations at the micro-level, focusing on the creation of health-oriented workspaces, integrated mental health resources for staff, and sustainable HR management models aligned with One Health values.

Keywords: One Health, workforce sustainability, staff wellbeing, private hospital, burnout mitigation, green healthcare policy

Room 4 - U2.5A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D2S2-R4-PP30

Advancing Sustainable Dental Practices: A Call for Green Dentistry Integration in Indonesia's Healthcare System

Felicia Christie¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Gadjah Mada University

feliciachristie@mail.uqm.ac.id

Abstract

The environmental impact of dental care remains an underexplored area in health policy, especially in low- and middle-income countries. In Indonesia, where over 70% of dental practices operate independently, the absence of standardized environmental guidelines contributes to unchecked carbon emissions and biomedical waste. This study addresses the knowledge gap in sustainable dental healthcare by evaluating the environmental performance of private dental clinics through an evidence-based framework. Environmental audits were conducted in five urban dental practices over a three-month period, assessing parameters such as daily energy consumption, single-use plastic usage, and waste segregation practices. Findings show that clinics generate an average of 2.5 kg of non-segregated biomedical waste daily, with over 60% of it being non-biodegradable plastics. Digital system adoption was minimal, and energy usage exceeded 30 kWh per day per clinic, largely due to outdated equipment. Semi-structured interviews with ten dentists revealed high awareness but low implementation of green initiatives, hindered by cost, lack of regulatory incentives, and limited supplier options. This study contributes to the field by providing the first localized audit-based evidence on environmental inefficiencies in Indonesia's dental sector. A proposed green dentistry policy framework includes financial incentives for eco-friendly practices, mandatory environmental training in dental education, and integration of green metrics into national health quality indicators. Embracing green dentistry is essential not only for environmental stewardship but also for aligning dental care with Indonesia's broader goals of climate-resilient, sustainable healthcare.

Keywords: green dentistry, environmental audit, health policy, sustainability, Indonesia

Room 4 - U2.5A Tahir Building 2th Floor : Evidence-Based Policy Action and Sustainable Green Healthcare

D2S2-R4-PP31

Barriers and Facilitators to Wellness-Oriented Sports Health Program Implementation: Regulatory and Implementer Perspectives in Rural-Urban Sleman, Indonesia (Local Regulation No. 5/2019)

Diana Fitri Milenia¹, Laksono Trisnantoro¹, Mirza Hapsari Sakti Titis Penggalih²

¹Department of Health Policy and Management, Faculty of Medicine, Health Management, and Nursing, Universitas Gadjah Mada

²Department of Nutrition, Faculty of Medicine, Health Management, and Nursing, Universitas Gadjah Mada

dianafitrimilenia@mail.ugm.ac.id

Abstract

Health is a fundamental determinant of quality of life and is globally recognized as a top public service priority. Despite the well-established benefits of physical fitness, recent data from rural-urban Sleman Regency, Indonesia, reveal alarmingly low levels of sports participation and physical fitness, with only 1% of the population categorized as having good physical fitness. This study aims to analyze the barriers and facilitators to implementing wellness-oriented sports health programs from both regulatory and implementer perspectives, in the context of Local Regulation No. 5/2019. Employing a qualitative descriptive design with an explorative approach guided by the Consolidated Framework for Implementation Research (CFIR), data were collected through in-depth interviews with policymakers and program implementers from relevant government offices and primary health centers. Thematic analysis was conducted using NVivo software, combining deductive coding based on CFIR constructs and inductive coding for emergent themes, with triangulation across data sources to ensure validity. The findings are expected to comprehensively identify regulatory and operational barriers and facilitators, informing actionable recommendations for strengthening intersectoral collaboration, optimizing resource allocation, and improving the effectiveness of wellness-oriented sports health programs. Ultimately, this study aims to support increased community participation in physical activity and advance holistic well-being in peri-urban Sleman.

Keywords: sports health, wellness, policy implementation, physical activity, Sleman Regency

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D2S2-R4-PP34

Global Warming and Diabetes Mellitus in Indonesia: A Scoping Review

Annisa Firdaus Winta Damarsya¹, Annisa Nuur Balqis

¹Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada

annisafirdauswintada@mail.ugm.ac.id

Abstract

Indonesia ranks fifth globally in adult diabetes, with cases projected to exceed 28 million in 2045. Concurrently, the global rising temperature is alarming, prompting concern over the potential health impacts. Previous global studies suggest possible relation between diabetes and global warming, underscoring the importance of this relationship to inform health policy and establish climate-adaptive healthcare planning. This research aims to identify current evidence on the relationship between global warming and diabetes mellitus in Indonesia.

The scoping review followed JBI framework and PRISMA-ScR. We developed a respective set of search strings that includes the following keywords and its synonyms: “global warming”, “link”, “diabetes”, “Indonesia”. Web of Science, PubMed, and Google Scholar were used. Inclusion criteria were studies that focus on global warming and connection with diabetes, involving Indonesian population, published in English or Indonesian. Using Rayyan, articles were independently screened by two reviewers. The search resulted in 400 records, of which two original research articles (one peer-reviewed paper and one preprint) were included in the review.

Both studies assessed the effects of rising temperature on diabetes-related morbidity, proxied by health care visits and hospitalisation. The preprinted study found an increase of 15% patients in primary care per 1°C additional average monthly temperature. The other study found a 25% rise in diabetes patient visits when the mean temperature exceeds 30°. It also found that under various levels of emission, by 2060-2080 Indonesia could face additional yearly costs as minimum as Rp7.8 million. If this issue is not addressed, the Indonesian health insurance system could face higher financial burden and the healthcare system would be overloaded. Therefore, we suggest similar research to be conducted at the regional levels to support local governments in providing adjusted healthcare resources, further develop an early warning system and targeted outreach programmes for vulnerable populations.

Keywords: Global warming, Diabetes mellitus, Indonesia

Room 5 - U2.5B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

D2S2-R5-PP36

Maintaining Sustainability: An Evaluation of Budgeting in the Dengue Control Program Following the Implementation of Wolbachia Technology

Dewi Nurlita¹

¹Department Health Policy Management, Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada, Yogyakarta, Indonesia

dewi.nurlita84@gmail.com

Abstract

Dengue remains a major global public health concern, including in Indonesia. As an endemic area, the City of Yogyakarta has implemented vector control measures using *Aedes aegypti* mosquitoes carrying Wolbachia since 2016. This technology has proven effective in reducing dengue incidence, hospital admissions, and the frequency of fogging activities in Yogyakarta. Long-term monitoring studies following the release of Wolbachia-infected mosquitoes are still ongoing. Meanwhile, budgeting plays a critical role in achieving health planning objectives. Through budget evaluation, it is possible to identify the impact of Wolbachia implementation on the financial planning of the dengue control program and to formulate strategies for its sustainability after implementation. This research adopts an explanatory case study approach with an embedded single-case design. Primary data will be collected through in-depth interviews with 10 purposively selected informants from the Yogyakarta City Health Office and the Center for Tropical Medicine, Gadjah Mada University, analyzed using thematic analysis. Secondary data will be obtained from planning and financial documents related to the dengue control program from 2021 to 2023. The findings are expected to show that promotive and preventive activities initiated prior to Wolbachia implementation have continued. Despite policy changes leading to budget efficiencies, the program must persist by optimizing available resources. Financial support from the central, provincial, and municipal governments has played a crucial role in ensuring the sustainability of the dengue control efforts. Cross-program and cross-sectoral collaboration, both in terms of programming and financing, is also necessary to address the resource limitations. These findings further emphasize the importance of integrated planning, implementation, and continuous monitoring and evaluation to ensure the effective use of funds in achieving the objectives of the dengue control program in Yogyakarta.

Keywords: Evaluation, budgeting, sustainability, dengue, Yogyakarta

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D2S2-R5-PP37

Paid by the Patient; The Unseen Costs of Care under JKN in Indonesia

Zsa Zsa Zeiss^{1,2}, Lutfan Lazuardi², Marteen Kok^{1,2}, T. Hoekstra²

¹Vrije Universiteit

²Department Health Policy Management, Faculty of Medicine, Public Health, and Nursing Universitas Gadjah Mada, Yogyakarta, Indonesia

e.w.p.zeiss@student.vu.nl

Abstract

Indonesia made remarkable efforts to achieve universal health coverage, particularly through the introduction of the Jaminan Kesehatan Nasional (JKN) scheme. Implemented from 2014 and onward, JKN covered approximately 95% of the population by 2024, increasing access to care and reducing catastrophic household expenditure. However, persistent out-of-pocket (OOP) payments, specifically for pharmaceutical costs and chronic diseases, raises concerns about the scheme's effectiveness in protecting households from financial hardship. Therefore, this study aims to research the differences in OOP expenses of patients after changing health insurance (status) in the Sleman Regency, Indonesia. A longitudinal cohort study was conducted with STATA 18 using data from the Health and Demographic Surveillance System (HDSS) in Sleman Regency, Yogyakarta. +/-3000 individuals were followed between 2015 to 2024. Change in insurance status, including JKN (formal, informal, subsidised), local government schemes (Jamkesda), and private insurance, was treated as the exposure. The primary outcome was OOP payment for healthcare (yes/no), assessed as a dichotomous variable. A longitudinal logistic regression model was used to examine associations between insurance status and OOP spending, adjusting for demographic, socioeconomic, and health-related confounders. Results will be further discussed, but preliminary findings suggest that JKN enrollment remains insufficient in preventing OOP costs in the Sleman Special District (DIY). These costs are influenced by service availability and the continued reliance on private or informal care sources. While DIY has a high density of puskesmas, the primary reason people choose private or informale services is due to stock shortage.

Keywords: JKN, health insurance, Out-of-Pocket payment, Indonesia, health expenditure, health policy

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D2S2-R5-PP39

The Role of the Health Office in the Implementation of Primary Care Integration in Palangka Raya City

Irma Noor Budianti¹, Likke Prawidya Putri¹

¹Department of Health Policy Management, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

irmanoorbudianti511802@mail.ugm.ac.id

Abstract

Primary Care Integration (PCI) is a vital element of Indonesia's national health system transformation initiated in 2022, aiming to reinforce the capacity and quality of primary healthcare services. A central component of this initiative is the enhanced role of local Health Offices in managing and coordinating the integration process. Palangka Raya City serves as one of the pilot regions for implementing PCI, emphasizing collaboration among Community Health Centers (Puskesmas), healthcare service networks, and cross-sectoral stakeholders. This study explores the involvement of the Palangka Raya City Health Office in planning, coordinating, supervising, and monitoring the implementation of PCI, with a focus on how the office facilitates integrated and network-based services to support primary care transformation. A descriptive qualitative approach was used, drawing on in-depth interviews with key informants such as Health Office officials, Puskesmas leaders, healthcare personnel, and cross-sectoral partners. Document reviews were also conducted to complement the interview data. The research was guided by the Consolidated Framework for Implementation Research (CFIR), examining elements such as external influences, organizational context, individual characteristics, implementation processes, and innovation attributes. Findings are expected to highlight the strategic role of the Health Office in navigating the complexities of PCI implementation, including identifying both enabling factors and potential obstacles within the local context. Through this analysis, the study aims to offer practical recommendations to strengthen local governance, enhance intersectoral collaboration, and improve the quality and sustainability of primary healthcare services in Palangka Raya. The outcomes are intended to contribute to broader efforts to align local health systems with national priorities and to improve public health outcomes through effective, integrated, and community-centered care.

Keywords: Health Office, Primary Care Integration, Health Transformation, Policy Implementation, Palangka Raya City

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D2S2-R5-PP51

Who Matters? A Stakeholder Mapping Study on Dental Public-Private Partnerships for Malaysia's Ageing Population

Nur Dini Ahmad Zawawi¹, Tuti Ningseh Mohd Dom¹, Haslina Rani¹, Aznida Firzah Abdul Aziz², Nur Saadah Mohamad Aun³, Khor Swee Kheng⁴

¹Department of Family Oral Health, Faculty of Dentistry, Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur, Malaysia

²Department of Family Medicine, Faculty of Medicine, Universiti Kebangsaan Malaysia, 56000 Kuala Lumpur, Malaysia

³Centre for Research in Psychology and Human Well-Being, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, 43600 Bandar Baru Bangi, Malaysia

⁴Angsana Health Sdn Bhd, Menara 2 KL Eco City 3, 59200 Kuala Lumpur, Malaysia

nurdini@ukm.edu.my

Abstract

Access to oral healthcare remains a significant challenge for underserved populations, particularly the elderly in Malaysia. With the increasing aging population, there is an urgent need to explore innovative models to enhance service delivery. Public-private partnerships (PPPs) have emerged globally as a strategic approach to bridge healthcare access gaps, yet little is known about their application in Malaysian dental services for older adults. This study aims to identify the key stakeholders involved in the PPP initiative aimed at improving dental access for elderly communities in Malaysia. A literature review was conducted using the search terms ("dental" OR "oral") AND "stakeholder" AND Malaysia across major health and social science databases. Complementary hand-searching of government websites was carried out to identify relevant policies and guidelines targeting elderly oral care. Results were extracted and mapped according to stakeholder groups, target population focus, and relevance to dental access for the elderly. Key stakeholders identified include the Ministry of Health (MOH), Ministry of Higher Education (MOHE), Malaysian Dental Association (MDA), Department of Social Welfare (JKM), non-governmental organizations (NGOs), private dental associations, and elderly care institutions. Stakeholder inclusion was based on explicit mentions of elderly or institutional care in documents. The mapping highlights the multisectoral nature of stakeholder involvement and the need for integrated planning and policy alignment to develop effective PPP models. Future phases will explore stakeholder roles, motivations, and barriers to inform the development of effective PPP frameworks that support national oral health goals and improve care for Malaysia's ageing population.

Keywords: Public-Private collaboration, dental access, elderly care, stakeholder identification, Malaysia

Room 5 - U2.5B Tahir Building 2th Floor : Resilient Integrated Health Systems through Sustainable Financing

D2S2-R5-PP1

Estimating The Economic Burden Of Disease In Palestine and Possible Barriers

Ahmed Abdelmajed Alkhodary^{1,2}, Syed Mohamed Aljunid^{1,3}, Aniza Ismail⁴, Amrizal Muhamad Nur^{1,5}

¹International Centre for Casemix and Clinical Coding, Faculty of Medicine, National University of Malaysia

²Ministry Of Health, Gaza Governorates, Palestine

³Department of Public Health and Community Medicine, School of Medicine IMU University, Kuala Lumpur, Malaysia

⁴Department of Community Health, Faculty of Medicine, National University of Malaysia

⁵PAPRSB Institute of Health Sciences, University Brunei Darussalam

akh77@live.com

Abstract

Globally, a dramatic increase in health-related expenditures can be seen. Recently, healthcare services have been considered among countries' high budget-consuming sectors. So, estimating healthcare cost became crucial. Several costing methods are used in healthcare services: step-down, activity-based, and casemix methods are getting more attention and are commonly used. Within the Palestinian context, several barriers face researchers in identifying the disease's economic burden, especially the current devastating aggression and brutal massacres. Firstly, healthcare service costs need to be identified by either of the three ways mentioned above. For the step-down method, costing can be done using UNU-CBG costing templates developed by the International Center for casemix and clinical coding at the National University of Malaysia (ITCC-UKM). Nevertheless, it is faced with incompleteness of the necessary basic hospital statistics and financial data. For the casemix method, DRGs grouping and costing can be done using the grouper software developed by the ITCC-UKM. This method is faced by the incompleteness of the ICD-10 and ICD9-CM codes for patient episodes. For the activity-based method, costing can be done using a specific checklist. This method is faced by incomplete documentation of some necessary medical procedures and investigations. The second step in estimating the economic burden is to identify the direct and indirect costs incurred by the providers, patients, and their families. The direct healthcare cost includes all payments related to the health condition paid within or outside healthcare facilities. This can be assessed using a specific questionnaire. On the other hand, the indirect costs include all disease-related productivity losses of the patients and family members estimated using a specific tool. The third step is to calculate the total cost per patient. The last step is to impute the national economic burden of the disease based on earlier findings and disease prevalence. This allows for estimating the economic burden and cost unit of diseases, increasing decision-makers cost consciousness for better allocation of resources, implementing cost containment initiatives, and future projections.

Keywords: Economic Burden, Costing, Healthcare, Palestine

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D2S2-R6-PP42

Acceptability and Feasibility Evaluation of the “Kader Santri Sehat”, a Student Health Cadre Pilot Program in an Islamic Boarding School in Yogyakarta, Indonesia

Wulan May Kusuma Dewi¹, Muhammad Ismail Al Birru¹, Ichlasul Amalia^{1,2*}, Lusha Ayu Astari², Fajrul Falah Farhany^{1,3}, Marchela Kurnia Dewanti¹, Anggra Nitva Nikamba¹, Indah Rizky¹, Sri Purwanti⁴, Yacoeb Jaen Khatami⁵, Hanggoro Tri Rinonce^{1,6}

¹Kader Santri Sehat Foundation, Indonesia

²Department of Health Policy and Management, Faculty of Medicine, Public Health, and Nursing (FMPHN), Universitas Gadjah Mada, Yogyakarta, Indonesia

³Center for Health Policy and Management, FMPHN, Universitas Gadjah Mada, Yogyakarta, Indonesia

⁴Department of Biostatistics, Epidemiology, and Population Health, FMPHN, Universitas Gadjah Mada, Yogyakarta, Indonesia

⁵School of Medicine, FMPHN, Universitas Gadjah Mada, Yogyakarta, Indonesia

⁶Department of Anatomical Pathology, FMPHN, Universitas Gadjah Mada, Yogyakarta, Indonesia
ichlasul.amalia@mail.ugm.ac.id

Abstract

The Kader Santri Sehat (KSS) program in Mlangi Islamic Boarding School (IBS), Yogyakarta, is a health promotion initiative, empowers students as health cadres (SHC) to manage school-based health posts and deliver preventive programs. This study aimed to evaluate the program's acceptability and feasibility for independent implementation, ensuring its sustainability and long-term effectiveness.

A convergence mixed-method approach guided by the CFIR (Consolidated Framework for Implementation Research) was used in this study. Quantitative data were obtained through an acceptance survey from 48 SHC and three health administrators (HA), while qualitative data were obtained through focus group discussions with the KSS-UGM team and vice principals for student affairs.

The participants were 60.78% male and 39.22% female, with an average age of 15 years (SD ± 2.02). Their educational backgrounds included 24 SHC (47.06%) from junior high (MTs), 12 (23.53%) from senior high (MA), 12 (23.53%) from vocational schools (SMK), and three collegians serving as HA. Acceptance rates were highest among MTs students at 89.29%, followed by 79.17% for MA and 75% for SMK. Qualitative findings revealed strong enthusiasm among students and support from school leaders, aligning with the health needs of the IBS community. However, barriers included limited formal institutionalization, lack of structural integration between school and boarding governance, and frequent cadre turnover due to graduation cycles.

The study highlights that the KSS program has high acceptability, its feasibility is moderate due to reliance on external facilitation and organizational gaps. Strengthening internal structure, enhancing coordination between governance systems, and establishing sustainable cadre regeneration are critical. These findings not only inform local practice but also offer valuable guidance for adapting student-centered, peer-based health interventions in other culturally rooted, low-resource, and faith-based school settings.

Keywords: Islamic Boarding School, Health Promoting School, Kader Santri Sehat, Implementation Research, Program Evaluation

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D2S2-R6-PP11

Prevalence of Period Poverty and Its Association with Socioeconomic Background Among Adult Women in Malaysia's Suburban Communities

Siti Athirah Zafirah Abdul Rashid¹, Nor Faiza Mohd Tohit¹, Wan Farizatul Shima binti Wan Ahmad Fakuradzi¹, Badrul Hisham bin Abd Samad¹, Nur 'Adnin binti Ahmad Zaidi¹

¹Department of Community Health, Faculty of Medicine and Defence Health, National Defence University of Malaysia

athirahzafirah@upnm.edu.my

Abstract

Period poverty remains a critical yet under-addressed issue, affecting the health and well-being of menstruating individuals. This study examines the prevalence of period poverty among adult women in suburban Malaysia and its association with key socioeconomic factors, including household income, education level, and household size. A cross-sectional study was conducted among 117 women aged 18-49 residing in PPR Raya Permai using self-administered questionnaires. Descriptive statistics determined the prevalence of period poverty, while chi-square analysis assessed associations with socioeconomic variables. The findings indicate that 18.8% of respondents experienced period poverty. Women from lower-income households, larger families, and with lower education levels were disproportionately affected. Chi-square analysis revealed significant associations between period poverty and education level ($p = 0.045$), household income ($p = 0.02$), and household size ($p = 0.014$). These results underscore the socioeconomic disparities contributing to period poverty and its broader implications for health and social equity. To mitigate period poverty, targeted interventions such as menstrual product subsidies, awareness campaigns, and educational programmes are essential. Addressing this issue through policy reforms can improve menstrual health and overall well-being among vulnerable communities in Malaysia.

Keywords: Period Poverty, Menstrual Health, Socioeconomic Factors, Malaysia, Public Health

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D2S2-R6-PP45

From Health to Productivity: Measuring the Effectiveness of Body Fit Challenge to Combat Obesity on Employee Health and Work Performance in Private Hospital in Yogyakarta

Maria Silvia Merry^{1,2}, Nita Kristiani¹, Hieronimus Indra², Andreasta Meliala¹

¹Department of Health Policy and Management, Faculty of Medicine, Public Health And Nursing Universitas Gadjah Mada Yogyakarta

²Panti Rapih Hospital Yogyakarta

dr.silvia.mk@gmail.com

Abstract

Workplace wellness programs have increasingly gained attention as a strategic approach to improving employee health and organizational performance, moreover in hospital. This study examines the effectiveness of the Body Fit Challenge, a wellness program aimed at combating obesity among healthcare workers. The program elaborates guidance from nutritionists, physiotherapists, and hypnotherapists, together with regular and timely biometric assessments and monthly progress monitoring to support participants in their health journey to maintain motivation.

The primary objective of this study is to evaluate the impact of the Body Fit Challenge on two key outcomes: employee health (both physical and mental) and work performance. This research utilizes quantitative measurements (e.g., BMI, waist circumference, stress levels, and job satisfaction surveys).

Data collected from employees who participated in the program were analyzed to determine improvements in physical health (e.g., reduction in BMI, improved fitness levels), mental well-being (e.g., reduced stress, increased job satisfaction), and work-related outcomes (e.g., productivity, absenteeism, and overall job performance).

Preliminary findings suggest that participation in the Body Fit Challenge has led to significant improvements in both employee health and performance. Key outcomes include a decrease in absenteeism, higher job satisfaction, and improved productivity, demonstrating the potential of wellness programs as a long-term investment in both employee well-being and organizational success.

This study highlights the importance of integrating health promotion initiatives into the workplace, showing that a healthy workforce is not only beneficial for individual employees but also contributes to greater organizational productivity and sustainability.

Keywords: Body Fit Challenge, obesity, productivity, employee wellness, health promotion

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D2S2-R6-PP14

Exploring Male Perspectives on Sexual and Reproductive Health in a Low-Income Urban Malaysian Community

Wan Farizatul Shima Wan Ahmad Fakuradzi¹, Nor Faiza Mohd. Tohit¹, Siti Athirah Zafirah Abd. Rashid¹, Nur 'Adnin Ahmad Zaidi¹

¹Department of Community Health, Faculty of Medicine and Defence Health, National Defence University of Malaysia

wanfarizatul@upnm.edu.my

Abstract

This study aimed to explore male perspectives on sexual and reproductive health (SRH) by assessing knowledge, attitudes, and practices among adult males in a low-income urban setting in Malaysia. A cross-sectional survey was conducted among 104 male residents of Program Perumahan Rakyat (PPR) Raya Permai in Kuala Lumpur using a structured, self-administered questionnaire. The questionnaire was developed and validated to measure SRH-related knowledge, attitudes, and behavioral practices, as well as demographic data. Statistical analyses, including Chi-square tests, were performed using SPSS version 27 to identify associations between SRH knowledge and demographic variables. Results indicated that 52.88% of respondents had high SRH knowledge, with awareness highest in pregnancy duration and contraceptive use but lowest in understanding male infertility and STI transmission. Attitudes were generally positive; over half supported religious-based SRH values and emphasized parental responsibility in sex education. However, misconceptions related to sexual coercion and gender roles persisted. Most participants (58.7%) demonstrated low-risk SRH practices, although risky behaviors such as unprotected sex and lack of routine health screenings were still reported. A significant association was found between ethnicity and SRH knowledge levels, $\chi^2(4, N = 104) = 9.85, p = 0.043$, suggesting that ethnic background influences SRH understanding. No significant relationship was found between education level and knowledge, possibly due to uniform exposure to SRH content during local awareness activities. The findings highlight the importance of culturally tailored, male-targeted SRH interventions to enhance awareness, promote responsible attitudes, and improve health outcomes among underserved populations.

Keywords: sexual and reproductive health, male involvement, low-income community, public health, health education

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Exploring Core Competencies of Emergency Department Nurses in Indonesian Hospitals: A Descriptive Interpretive Study

Arista Maisyaroh¹, Ibrahim Rahmat², Syahirul Alim³

¹Doctoral Study Program, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

²Department of Mental Health and Community Nursing, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

³Department of Basic and Emergency Nursing, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada

aristamaisyaroh@mail.ugm.ac.id

Abstract

Emergency rooms (EDs) are designed to handle patients in critical conditions that require immediate treatment. The work environment in the ED tends to be dynamic, stressful, and unpredictable; therefore, competent nurses are required to manage it. However, studies on the competence of emergency nurses are still minimal and research in Indonesia is exceptionally scarce. This study aimed to explore the competencies and nursing values of emergency room nurses in Indonesia. This study used descriptive, interpretative, and in-depth interviews with 15 emergency department nurses in type A, B, and C Indonesian hospitals. Data were analyzed using a descriptive interpretative approach and thematic analysis, including constant comparison, interpretation, coding procedures, initial coding, focused coding, and categorization. This study revealed ten core competencies of emergency nurses: effective communication, patient-and family centered care, specific technical skills, teamwork, management of resources and environment, resilience, professional development, integrity, legal ethics, and quality assurance. The results of this study describe the competencies of emergency nurses in Indonesia and the need to prepare competency standards for their future development.

Keywords: competence, descriptive interpretive, emergency room, nurse

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