RECRUS
Research Newsletter

Volume 2, Issue 17, July 2022, 341 - 401

UPM UNIVERSITI PUTRA MALAYSIA BERILMU BERBAKTI

HPUPM HOSPITAL PENGAJAR UPM

High-Quality Research, True Academics, Real Experts

IN THIS ISSUE

Breaking News

Research Achievements and Impacts

Clinical Epidemiology

Current Evidence

Announcements

REGISTER NOW!

- MJH Series 12: Effect of Physical Therapy vs Arthroscopic Partial Meniscectomy in People with Degenerative Meniscal Tears: 23rd September 2022
- Artificial Intelligence in Healthcare: A Tea Session with AI Experts, 4th August 2022
- Wanted and ready to do a Cochrane systematic review? **[Calling for registration]**
- Research Colloquium Series 4
- Research Development Workshop, 25-26 August 2022 **[FINAL CALL]**
- 3rd Clinical Epidemiology Workshop, 18 – 20th October 2022 **[Calling for registration]**
- Upcoming Conference and Congress
  - i. 6th International Clinical Trials Methodology Conference 2022
  - ii. 9th International Congress on Peer Review and Scientific Publication, Chicago IL
  - iii. 9th Asia Pacific Primary Care Research Conference, 1 – 3 December 2022
- NeuroCoB Book Promo **[Order Now]**

FROM THE EDITOR'S DESK

We want to hear you about the RECRUS Research Newsletter! Join the Reader Survey and stand a chance to win a RM200 e-voucher to participate in research activities organised by CRU.

Check out the list of the **JCR's Q1-Q4 journals that publish without APC**. Do chip to improve on the list together in the Wikipedia-spirit. CRU will check the list from time to time and maintain its accuracy and update it JCR's ranking. Other Breaking News include the going to be live in December 2022 the **Malaysia Open Science Platform (MOSP)**. CRU plans to organise a couple of activities to understands MOSP from the Academy Science Malaysia. Don't overlook a new tool from DORA the **SPACE Rubric to Assist in the Reformation of Academic Assessment**. The world is moving from quantitative metrics-focused assessment of research and researchers to a more inclusive qualitative+quantative where why and how the research matters to others are inquired, and with the better research assessment as a strong support to the academic medical centre tripartite missions of clinical services, clinical research and teaching.

The evidence presented in the **Meta-Journal Hour (MJH) Series 10** on the *Rotating Night Shift Work and Healthy Aging After 24 Years of Follow-up in the Nurses' Health Study* may suggest lifestyle changes that may overcome the possible detrimental effects of night shift work among those who are duty-bound or profession-bound to it. There are a couple of articles on the **Implementation Science** and **Medical Audits**. They should be refreshing to all in differentiating their proper roles and in relation to clinical research proper. CRU is producing an infographic that represent all research designs, and look out for it in the coming issue in this newsletter.

The highlight of this issue is an excerpt from the article on **EBM+**. This conceptual proposal and other similar papers advocate appreciation of different study designs aside randomised controlled trials and systematic reviews and meta-analyses, in the quest for the best clinical evidence.

Like before, don't missed the important announcements on exciting activities in the coming months by CRU, in and out of Malaysia .

RECRUS Editorial Members
Associate Professor Dr. Chew Boon How (Editor-in-Chief)
Dr. Yew Sheng Qian (Papers Editor)
Pn. Salwana Ahmad (Papers Editor)
Pn. Nurfaizah Saibul (Papers Editor)
Cik Nurul Iman Hafizah Adanan (Papers Editor)
Dr. Nur Aazifah Ilham (News Editor)
Cik Faridzatul Syuhada Abdul Rashid (Production Editor)
Cik Intan Basirah Abd Gani (Technical Editor)
Pn. Wan Zalikha Nabila Zul Shamshuddin (Technical Editor)

Unit Penyelidikan Klinikal
Hospital Pengajar Universiti Putra Malaysia Persiaran Mardi - UPM
43400 Serdang
Selangor Darul Ehsan MALAYSIA
03-9769 9763 /9762 /9761 /9759
cru_hpupm@upm.edu.my

eISSN 2805-5004

Click to visit our Facebook and Youtube page

July 2022
Vol. 2 Issues 17
Page 341

BREAKING NEWS

RECRUS Research Newsletter Reader Survey

We would like to know readers' opinion on our newsletter after about a year of its publication. Kindly answer the online survey and you may stand a chance to win a voucher worth RM 200 to attend upcoming research-related activities organized by CRU.

CLICK TO ANSWER THE SURVEY

OR SCAN QR CODE BELOW

July 2022
Vol. 2 Issues 17
Page 342

SELECTING THE POTENTIAL JOURNAL OUTPUT FOR ARTICLE PUBLICATION

By: Dr. Yew Sheng Qian
Medical Officer, CRU

Publication of scholarly work in peer-reviewed journals is a well-established and reliable method of disseminating science to worldwide audience (1). Whether you are a clinician, academician, researcher or postgraduate candidates, article publication is an exciting and fruitful outcome of the rigorous research work that you previously conducted. In some research institutions, publication of scientific articles could even be one of the requirements or key performance indicators (KPI) for career advancement.

Although article publication is a noble and important task, authors may face challenges during or after the publication process. One of the greatest challenges which impede the publication process is the identification of the appropriate journal for manuscript submission (2). Another frequently encountered barrier is the high cost of publication for accepted manuscripts, also known as Article Processing Charge (APC) as required by some open access journals.

CRU created and highlighted a list of potential scientific journals indexed in the Journal Citation Reports and Web of Science by Clarivate that are reputable and in accordance with the research niches of HPUPM. This, hopefully, will help members in HPUPM and others alike in selecting the most appropriate journal for manuscript submission and publication. This follows an earlier article on low-cost publishing strategies in scientific journals from us (3). Presented is a list of journals requiring and not requiring APC.

Since this list of journals is not meant to be exhaustive, we welcome you to edit and add-on (using the template provided) journals to the list. The list of journals can be accessed via the link below:

click here

https://docs.google.com/spreadsheets/d/14Omkcy-LO2SckPle-wpkeP42eO-hOqbq1kbekEl57uQ/edit?usp=sharing

References

1. Ross-Hellauer T, Tennant JP, Banelytė V, Gorogh E, Luzi D, Kraker P, et al. Ten simple rules for innovative dissemination of research. PLOS Computational Biology. 2020;16(4):e1007704.
2. Hussain A, Soni B, Kumar A. Qualiten Insight [Internet]: Qualiten Press. 2021 2021/07/20/T18:00:59Z. Available from: https://www.qualitenpress.com/qualiten-insight/news-analysis/qualiten-09001000003-news-analysis-challenges-science-publishing-author/.
3. Boon How C. Tips on low-cost publishing in scientific journals. RECRUS Research Newsletter. 2022;2(16):7-8.

July 2022
Vol. 2 Issues 17
Page 343

Malaysia Open Science Platform (MOSP)

By: Nurfaizah Saibul

Universiti Putra Malaysia (UPM) has signed the Memorandum of Understanding (MoU) of **Projek Rintis Malaysia Open Science Platform (MOSP)** with the Academy of Science Malaysia (ASM) on 14th July 2022. The initiative also involves other research universities in Malaysia; Universiti Malaya (UM), Universiti Sains Malaysia (USM), Universiti Kebangsaan Malaysia (UKM) and Universiti Teknologi Malaysia (UTM).

News Article:
https://www.upm.edu.my/berita/upm_sertai_projek_rintis_platform_sains_terbuka_malaysia-67780

What is Malaysia Open Science Platform (MOSP)?

- A national initiative under the Science, Technology, and Innovation Policy 2021-2030 by the Ministry of Science, Technology, and Innovation (MOSTI) to enable local researchers to share their research data to be accessed by public.
- To encourage open data sharing for technology development through research, development, commercialization, and innovation (R&D&C&I) in research, industry players, and society.
- The initiative has supported the importance of harnessing the potential impact of Open Science. The pilot initiative has launched on 7th November 2019.
- Through the Academy of Sciences Malaysia (ASM), the Malaysia Open Science Alliance was formed to pave the way toward realizing MOSP as a strategic transformative initiative to strengthen STI Collaborative Ecosystem for Malaysia.

What is Open Science (OS)?

Open science (OS) is the movement to make scientific research (including publications, data, physical samples, and software) and its dissemination accessible to all levels of society, amateur or professional.

Aims of Malaysia Open Science Platform (MOSP)

This initiative aims:

- To make Malaysia's research data a valuable national asset by developing a trusted platform that enables accessibility and sharing of research data aligned to national priorities and international best practices
- To encourage researchers in Malaysia to share their resources and use them optimally. This is one of the best platforms for local researchers to expand and strengthen their research networking and trans-disciplinary collaborations.
- To increase the research outputs and contribute the best solutions for various current issues in Malaysia. It helps to reduce the repetition or duplication of research in the future.

MOSP is expected to be accessible to the public in **December 2022.**

For further information, please visit:
https://www.akademisains.gov.my/mosp/

https://www.facebook.com/MalaysiaOpenSciencePlatform

Malaysia Open Science Platform (MOSP)

Malaysia Open Science Alliance Working Group on Guidelines will lead the pathway towards the drafting of the National Guideline on Open Science through nationwide stakeholders' engagement and by conducting a Landscape Study on Open Science in Malaysia.

Two deliverables are expected from this Working Group:

1. **A landscape study on Open Science in Malaysia.**
2. **National Guidelines on Open Science.**

https://www.akademisains.gov.my/mosp/policy-and-guidelines/

Guidelines

The landscape study would call for collaboration among all stakeholders at all levels of organizations including **ministries, government agencies, HLIs, GRIs, scientists and industrial players** to sit together and come up with a solution-based position paper, documenting the level of readiness of open science and all necessary actions required to implement MOSP at a national level, and subsequently, at an international level.

The focus of the study would be measuring indicators, which are:

1. **Available Policies**
2. **Number of Repositories**
3. **Skill Capacity**
4. **Infrastructure Capacity**

3 Focus Areas of MOSP

Capacity Building and awareness (CBA)

https://www.akademisains.gov.my/mosp/capacity-building-and-awareness/

This CBA working group:

1. Specifically tasked to develop a localized training module, which will be the guideline to train and upscale trainers (especially librarians) into Digital Data Librarians/Data Librarians/Data Curators. This module would steer Malaysia towards maximizing the potential of research data as a tool to advance the research and development industry.
2. Responsible for creating awareness and promoting MOSP initiatives nationwide through social media (Facebook, Twitter, and Instagram).
3. Promoting MOSP through various channels, including infographics, billboards, webinars, videos, media presence on television as well as radios.
4. Establishes great relationships and engagements with various international organizations such as UNESCO, OECD, Arab Open Science, European Open Science, Global Open Science Cloud etc.

Infrastructure

https://www.akademisains.gov.my/mosp/infrastructure/

1. **The infrastructure working group** will focus on the development of technical specifications and MOSP prototype prior to the deployment of this platform among the five research universities in Malaysia.
2. The potential platform architecture and execution model for MOSP will be identified with reference to the landscape study and views from professionals and stakeholders.
3. The technical specification then will be prepared based on the selected architecture.
4. The working group will seek inputs for technical specification from local champions, international experts and companies then prepare Request for Proposal for the model implementation.

The SPACE Rubric to Assist in the Reformation of Academic Assessment

By: Assoc. Prof. Dr. Chew Boon How

DORA (the Declaration on Research Assessment) has recently shared another new set of resources for the assessment of scholarly research, the **SPACE** rubric. It is a tool to help academic assessment reform when research output and researchers from all disciplines are practically and robustly evaluated, with responsible use of metrics that align with core academic values that promote consistency and transparency in decision-making.

The infographic (CC BY 4.0) below shows the briefs of its components (rows) and progresses (columns) of the reform that may happen. It aims to facilitate and encourage effort of institutions in reforming their assessment of research and researchers. Do read about the rubric's background, recommendations for use and important cautions in the application here.

Other related tools include:

1. The SCOPE Framework: A five-stage process for evaluating research responsibly
2. Rethinking Research Assessment: Ideas for Action
3. Rethinking Research Assessment: Unintended Cognitive and Systems Biases
4. Balanced, broad, responsible: A practical guide for research evaluators
5. HuMetricsHSS Workshop Kit
6. Metrics Toolkit

,

RETHINKING RESEARCH ASSESSMENT

S.P.A.C.E. TO EVOLVE ACADEMIC ASSESSMENT

A RUBRIC FOR ANALYZING INSTITUTIONAL PROGRESS INDICATORS AND CONDITIONS FOR SUCCESS

Research and researcher assessment is a systems challenge, suggesting that institutions that prioritize developing infrastructures to support their efforts may be better positioned to achieve their goals than those focused only on individual solutions.

July 2022
Vol. 2 Issues 17
Page 346

	FROM **FOUNDATION...** *Core definitions and shared clarity of purpose*	TO **EXPANSION...** *Increased traction and capability development*	TO **SCALING** *Accelerated uptake and continuous improvement*
STANDARDS FOR SCHOLARSHIP How are new definitions of "quality scholarship" formulated and applied?	**ALIGNMENT** ON VALUES AND GOALS *THIS MIGHT LOOK LIKE...* Standards are explicitly **designed and articulated to align with institutional mission and values**, such as increasing equity and support for traditionally underrepresented, minoritized groups New standards for scholarship consider the **balance across research, teaching, and service** contributions including training, mentoring and good citizenship Specific definitions and standards of "quality" with regard to scholarship are articulated and **shared across** disciplines and review/promotion committees	**DIVERSIFICATION** OF STANDARDS *THIS MIGHT LOOK LIKE...* Scholarship is assessed using **diverse indicators** (e.g. societal impact), (**units of assessment** e.g. full body of work v. individual articles), and **forms of output** (e.g. non-journal contributions) Indicators of quality recognize **non-individualized activities and accomplishments** like team science New definitions of "scholarship" are **deployed across the full range of institutional disciplines**	**ADOPTION** OF NEW PRACTICES *THIS MIGHT LOOK LIKE...* Faculty have the ability to **customize success measures** to reflect their research interests and goals New standards, definitions, and criteria for evaluating the quality and impact of scholarship are **integrated into the language and processes of new assessment practices**
PROCESS MECHANICS AND POLICIES How are new practices incorporated into review structures, processes, and institutional policies?	**DEBIASING** DELIBERATIVE JUDGMENTS *THIS MIGHT LOOK LIKE...* Meaningful and appropriately **rigorous qualitative structures for academic assessment,** such as narrative CVs, are given due weight Structures and processes are **applied consistently across assessment activities**, taking into consideration alternate paths and starting points Use of **new assessment mechanics extend beyond traditional evaluative contexts** into ensuring equitable opportunities, mentoring, and retention to increase research and researcher diversity	**CAPACITY** TO SUPPORT NEW ACTIVITIES *THIS MIGHT LOOK LIKE...* **Training on the goals and procedures of assessment processes and practices** are accessible and continually maintained Institutions design processes take into account the **resource capacity of committee members to effectively adopt new assessment practices,** such as additional burdens on time Institutions have **designated senior functions or offices to ensure faculty capacity** for new assessment practices and principles	**INTEGRATION** INTO EXISTING SYSTEMS *THIS MIGHT LOOK LIKE...* Assessment mechanics can be **flexibly applied and adapted** to accommodate diverse disciplines Mechanisms to support practices are **codified and written into institutional policies** New processes and practices are **seamlessly integrated** and widely adopted
ACCOUNTABILITY How are individuals and institutions held liable for executing on new assessment practices?	**TRANSPARENCY** AND CLARITY OF GOALS *THIS MIGHT LOOK LIKE...* The goals, principles, and practices of academic assessment and review, promotion, and tenure (RPT) activities are **transparent and clearly articulated**, and agreed upon by all participants Institutions have **clearly defined expectations for adherence** to academic assessment practices **Examples of "what good looks like"** are collected and shared to more concretely illustrate target outcomes and behaviors	**ADHERENCE** THROUGH COMMITMENT *THIS MIGHT LOOK LIKE...* Research evaluators **self-monitor adherence** to academic assessment principles and practices **Senior leaders and committee members actively stipulate equitable assessment practices** during both formal and informal career development contexts Institutions model **ecosystem-level accountability**, such as ensuring that system-level incentives align with and support agreed-upon principles and practices	**PROACTIVITY** IN ENGAGEMENT *THIS MIGHT LOOK LIKE...* **Individuals actively contribute** to the development and review of new practices and principles **Departments proactively broaden and conduct outreach activities** to include new or minoitized applicants **Faculty serve as "ambassadors"** for new academic assessment practices, such as when serving as external committee members
CULTURE WITHIN INSTITUTIONS How are assessment practices perceived and adopted both within and outside of formal evaluation activities?	**INCLUSION** AND ACCESS *THIS MIGHT LOOK LIKE...* **More diverse types of individuals are involved in both defining and participating in career advancement processes,** such as including early career researchers on RPT committees **Representation of minoritized applicants meets or exceeds equity goals** for both new hires and researcher retention Career growth and mentoring systems are intentionally designed to provide ongoing support for underreprsented hires	**ADVOCACY** AT INSTITUTIONAL LEVELS *THIS MIGHT LOOK LIKE...* Adoption of new assessment mechanisms is **supported and advocated for by departmental and institutional leaders** **All individuals actively contribute** to building more equitable practices–not just minoritized ones New **research assessment norms are increasingly adopted as a default** by faculty, administrators, and applicants	**REFLEXIVITY** THROUGH REFLECTION *THIS MIGHT LOOK LIKE...* "Positive friction," or intentional **pause points to reflect on assessment practices and slow down business-as-usual processes** is incorporated into both formal and informal assessment practices All participants in assessment activities feel processes achieve **a balance of effectiveness and efficiency**
EVALUATIVE AND ITERATIVE FEEDBACK How are intervention outcomes and progress toward institutional values captured and continually improved upon?	**ARTICULATION** OF DIVERSE INDICATORS *THIS MIGHT LOOK LIKE...* **Goals and success criteria** for individual academic assessment interventions are well-defined and shared Use of **leading indicators** (e.g. increased diversity of inquiries for open positions) supplements lagging indicators (e.g. increased diversity of hires) when gauging intervention efficacy Goals and **success criteria are automatically reviewed** whenever institutional strategy is updated	**SYSTEMATIZATION** TO GAIN CONSISTENCY *THIS MIGHT LOOK LIKE...* Quantitative and qualitative **data from interventions are captured in a standardized way** Mechanisms that **capture both quantitative and qualitative feedback** are explicitly designed and embedded into assessment processes from the outset **Best practices and examples** of measurement and/or gathering feedback are codified and shared across disciplines within the institution	**IMPROVEMENT** USING FEEDBACK LOOPS *THIS MIGHT LOOK LIKE...* Interventions that don't achieve desired outcomes are considered **learning opportunities**, not failures Outcomes and data are collected and monitored to ensure high standards of evaluation quality and identify **unintended consequences or adverse effects** Feedback and other **indicators are refined and/or examined in aggregate** to identify and investigate patterns or opportunities for course-correction

This is Open Access content distributed in accordance with the Creative Commons Attribution 4.0 International License

Hatch, A and R. Schmidt. (2021) Rethinking Research Assessment: SPACE to Evolve Academic Assessment. DORA.

RETHINKING RESEARCH ASSESSMENT

S.P.A.C.E. TO EVOLVE ACADEMIC ASSESSMENT

A RUBRIC FOR ANALYZING INSTITUTIONAL PROGRESS INDICATORS AND CONDITIONS FOR SUCCESS

July 2022
Vol. 2 Issues 17
Page 347

	FOUNDATION	EXPANSION	SCALING
STANDARDS FOR SCHOLARSHIP	**Alignment** on values and goals	**Diversification** of standards	**Adoption** of new practices
PROCESS MECHANICS AND POLICIES	**Debiasing** deliberative judgments	**Capacity** to support new activities	**Integration** into existing systems
ACCOUNTABILITY	**Transparency** and clarity of goals	**Adherence** through commitment	**Proactivity** in engagement
CULTURE WITHIN INSTITUTIONS	**Inclusion** and access	**Advocacy** at institutional levels	**Reflexivity** through reflection
EVALUATIVE AND ITERATIVE FEEDBACK	**Articulation** of diverse indicators	**Systematization** to gain consistency	**Improvement** using feedback loops

As institutions increasingly adopt new assessment principles and practices, they may strive to expand the depth of their individual capabilities and develop higher levels of system integration.

However, because institutions are naturally at different stages of readiness and evolution, there is no one-size-fits all approach and indicators of progress may not look the same.

INCREASED DEPTH OF CAPABILITY

Gaining increased scalability requires moving from initial definition to deeper engagement and continual improvement

SYSTEMS-LEVEL INTEGRATION

Building consistency and resiliency into new practices requires systems-level interconnectedness

As a result, institutions at various stages of reform may benefit from focusing on different activities:

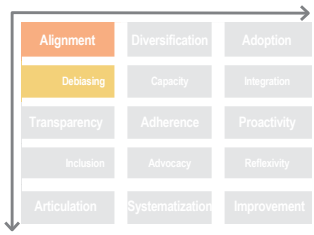
This might mean concentrating more on:

GETTING STARTED

Acknowledging the need for change

Institutions just starting to think about research and scholarship assessment reforms may not yet be ready to begin testing new practices, and instead be primarily focused on articulating and building a case for why new assessment practices will be beneficial and **aligning on values** to support them.

They might also start by identifying and **diagnosing the nature of biases** that exist in their assessment systems, which can help institutions get more specific about what issues need to be addressed more systematically in new structures and processes.

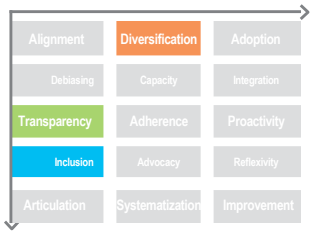


SETTING THE GROUNDWORK

Active engagement in defining new principles and practices

Research increasingly suggests that diverse groups create solutions and policies that are less biased. Actively **engaging a diverse set of participant individuals** to ensure breadth of representation can help ensure **that efforts are inclusive from the outset**, as well as contributing to more broadly applicable and relevant assessment mechanisms.

Conducting work related to assessment reform **with high levels of transparency** can also help to encourage an increased sense of credibility in the final results.

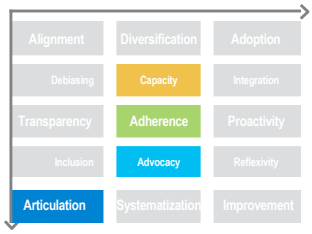


BUILDING STRUCTURAL SUPPORT

Ability, resources, and capacity to enable desired change

Ensuring that new assessment principles and practices are internalized and actively used requires addressing **issues of capacity**. This can mean setting aside sufficient time and support to learn new mechanisms or processes, but also recognizing that more holistic and qualitative inputs may initially require more processing time than metrics like JIF.

Supporting uptake may benefit **from top-down advocacy** and **structures to encourage adherence** and reduce reactance, as well as **articulating and adopting a well-rounded set of leading and lagging indicators** to more quickly identify what is working or not.

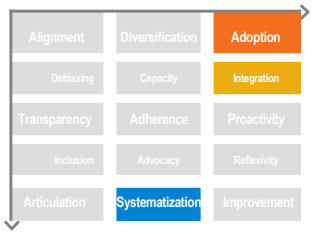


PLANNING FOR SCALE

Adoption of new assessment practices

While internalizing new principles and practices at an individual level is important, mid- or late-stage reform institutions can **increase adoption** by intentionally building in apparatuses to **systematically monitor and scale new models**.

Integrating values and desirable actions into processes and structures can increase the likelihood that new reforms are applied consistently, and can also reduce the pressure on individuals to teach or convince others given that preferred behaviors are essentially "baked in" to institutional norms and activities.

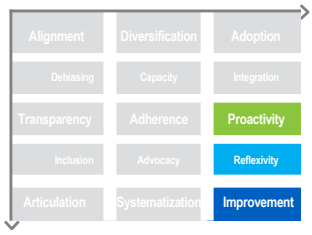


CONTINUAL IMPROVEMENT

Adaptation and refinement

Institutions at later stages of research and scholarship assessment reform will benefit from recognizing that it is an **ongoing process of monitoring and reflexivity** rather than a one- and-done accomplishment.

This requires **proactively identifying issues as conditions change**. It also means adopting an **anticipatory mindset for improvement** to recognize how success can also lead to unintended consequences, such as systems that achieve higher equity of applicants and hires but which fail to provide support post-hire mentoring or access to opportunities.



This is Open Access content distributed in accordance with the Creative Commons Attribution 4.0 International License

Hatch, A and R. Schmidt. (2021) Rethinking Research Assessment: SPACE to Evolve Academic Assessment. DORA.

RECRUS
Res. Newsl.

July 2022
Vol. 2 Issues 17
Page 348

RESEARCH ACHIEVEMENTS AND IMPACT

Congratulations

PROF. DR. SYAFINAZ BINTI AMIN NORDIN

ANUGERAH FELLOWSHIP NAIB CANSELOR

PENYELIDIKAN DAN INOVASI

KATEGORI PENYELIDIK CEMERLANG (SAINS DAN TEKNOLOGI)

MAJLIS GEMILANG AKADEMIA PUTRA 2021

July 2022
Vol. 2 Issues 17
Page 349

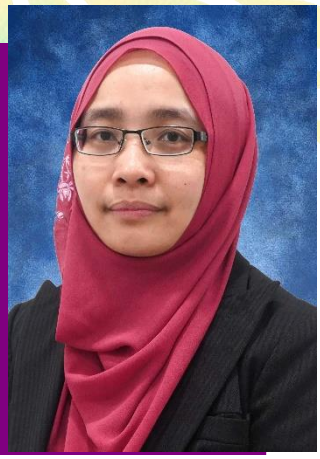
RESEARCH ACTIVITIES REPORT CRU ASSOCIATE MEMBERS (CRAMS) AND CLINICIAN SCIENTIST COTERIE (CSC) FOR SERIE 3/2022

SHARING FROM CRAMS AND CSC'S MEMBER!

By Salwana Ahmad

CRAMs Online Meeting was held every 2 months among CRAMs Members, Clinician Scientist Coterie (CSC) Members and staff among Hospital Pengajar, UPM and Faculty of Medicines and Health Sciences, UPM. This session was intended for the CRAMs members to share their research activities in the department and how they are coping with all the coming challenges and strive to keep moving forward. During the session, the members will have to present their research activities report comprising of remarkable research activities and outputs, promoting positive perceptions and motivation for facing challenges, improving clinical research, and cultivating research & networking. In light of cultivating the spirit of research and knowledge sharing, here are the summaries of the presentation shared for all of us to get to learn how is everyone is doing in proceeding with the quality research in UPM.

DEPARTMENT OF MEDICAL MICROBIOLAGY



Background:

Department of Medical Microbiology Hospital Pengajar Universiti Putra Malaysia provides diagnostic laboratory services for clinical specimens received from clinic/ward in Hospital Pengajar Universiti Putra Malaysia. The department provide essential knowledge and understanding for medical and health sciences students in the field of bacteriology, virology, mycology, parasitology, entomology and host-pathogen interactions besides heavily involves in scientific research in line with the university status as one of the major research universities in Malaysia.
Focus of the department is the zoonoses diseases.

CRAMs Member: Tengku Zetty Maztura Binti Tengku Jamaluddin

REMARKABLE RESEARCH ACTIVITIES AND OUTPUTS

The department has The Department has been actively involved in research related to many zoonotic diseases, including but not limited to leptospirosis, COVID- 19, cryptosporidiosis

Research Highlights and Achievements:

STUDY

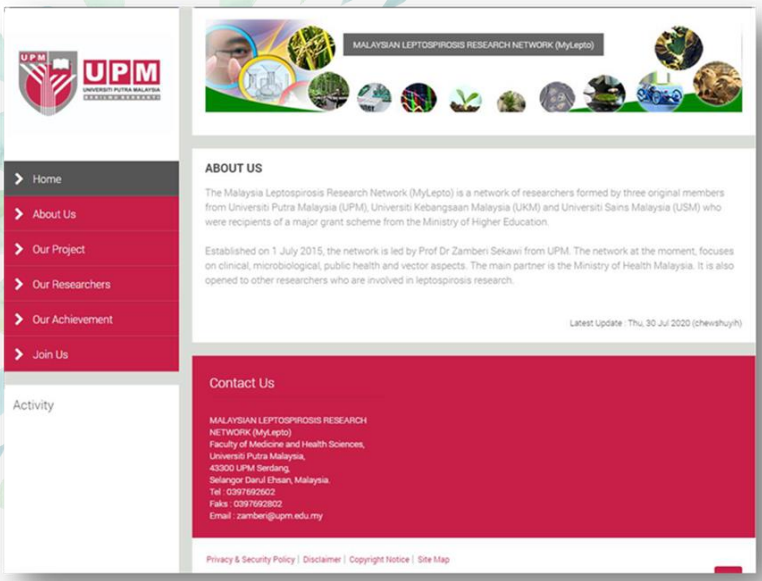
STUDY ON LEPTOSPIROSIS

- ✓ 9 new *Leptospirosis Sp.* has been discovered in Malaysia.
- ✓ new rapid detection method for *Leptospira* has been developed to reduce turnaround-time by using loop-mediated isothermal amplification (LAMP).
- ✓ Provide laboratory services for microscopic agglutination test (MAT)
  - Gold standard method and real-time PCR.
  - Currently providing services for animal samples
  - Further development for laboratory diagnosis – human
- ✓ Two patents filed for the detection of Leptospira.

MYLEPTO STUDY

- ✓ Established the Malaysia Leptospirosis Research Network (MyLepto).
- ✓ a multidisciplinary research network of Malaysian researchers from various backgrounds who are actively involved in leptospirosis research.

GLEAN – MYLEPTO STUDY *2016*



RESEARCH HIGHLIGHTS: PUBLICATIONS

>40 publications:Articles & books

PLOS NEGLECTED TROPICAL DISEASES

RESEARCH ARTICLE

Leptospira interrogans and *Leptospira kirschneri* are the dominant *Leptospira* species causing human leptospirosis in Central Malaysia

Noraini Philip[1], Norliza Bahtiar Affendy[1], Siti Nur Alia Ramli[1], Muhamad Arif[2], Pappitha Raja[3], Elanngovan Nagandran[4], Pukunan Renganathan[4], Niazlin Mohd Taib[1], Siti Norbaya Masri[1], Muhamad Yazli Yuhana[5], Leslie Thian Lung Than[1], Mithra Seganathirajan[6], Cyrille Goarant[7], Marga G. A. Goris[8], Zamberi Sekawi[1], Vasantha Kumari Neela[1*]

Abdullah *et al. BMC Public Health* (2019) 19:628
https://doi.org/10.1186/s12889-019-6981-0

BMC Public Health

RESEARCH ARTICLE Open Access

Leptospirosis and its prevention: knowledge, attitude and practice of urban community in Selangor, Malaysia

Nurul Munirah Abdullah[1], Wan Mohd Zahiruddin Wan Mohammad[2], Mohd Nazri Shafei[2], Surianti Sukeri[2], Zawaha Idris[3], Wan Nor Arifin[4], Noramira Nozmi[1], Siti Nor Sakinah Saudi[1], Suhailah Samsudin[1], Abdul-Wahab Zainudin[5], Rukman Awang Hamat[1], Rosni Ibrahim[1], Siti Norbaya Masri[1], Suhainizam Muhammad Saliluddin[6], Aziah Daud[2], Malina Osman[1] and Tengku Zetty Maztura Tengku Jamaluddin[1*]

Contents lists available at ScienceDirect
Microbiological Research
journal homepage: www.elsevier.com/locate/micres

Leptospirosis in human: Biomarkers in host immune responses

Chin VK[a,*], Lee TY[b,c], Lim WF[b,d], Wan Shahriman YWY[a,e], Syafinaz AN[a], Zamberi S[a], Maha A[b]

European Journal of Clinical Microbiology & Infectious Diseases
https://doi.org/10.1007/s10096-019-03699-5

ORIGINAL ARTICLE

Raised levels of Il-6, Il-17a, and Il-22 in fatal leptospirosis

Wan Shahriman Yushdie Wan Yusoff[1,2] · Maha Abdullah[3] · Zamberi Sekawi[2] · Fairuz Amran[4] · Muhammad Yazli Yuhana[5] · Niazlin Mohd Taib[5] · Ivan Kok Seng Yap[6] · Leslie Thian Lung Than[5] · Anim Md. Shah[7] · Alex van Belkum[8] · Syafinaz Amin Nordin

Zahiruddin *et al. BMC Public Health* (2018) 18:331
https://doi.org/10.1186/s12889-018-5234-y

BMC Public Health

RESEARCH ARTICLE Open Access

Development and validation of a new knowledge, attitude, belief and practice questionnaire on leptospirosis in Malaysia

Wan Mohd Zahiruddin[1*], Wan Nor Arifin[2], Shafei Mohd-Nazri[1], Surianti Sukeri[1], Idris Zawaha[3], Rahman Abu Bakar[3], Rukman Awang Hamat[4], Osman Malina[4], Tengku Zetty Maztura Tengku Jamaludin[4], Arumugam Pathman[1], Ab Rahman Mas-Harithulfadhli-Agus[1], Idris Norazlin[1], Binti Samsudin Suhailah[4], Abdul Wahab Zainuddin[5] and Daud Aziah[1]

Contents lists available at ScienceDirect
IJP: Parasites and Wildlife
journal homepage: www.elsevier.com/locate/ijppaw

Invited article

Detection of rodent-borne parasitic pathogens of wild rats in Serdang, Selangor, Malaysia: A potential threat to human health

Mustapha Tijjani[a,b,*], Roslaini Abd Majid[a], Sharif Alhassan Abdullahi[b,c], Ngah Zasmy Unyah[a,*]

Contents lists available at ScienceDirect
Journal of Infection and Public Health
journal homepage: http://www.elsevier.com/locate/jiph

Diagnostic accuracy of rapid diagnostic tests for the early detection of leptospirosis

Siti N. Alia[a], Narcisse Joseph[a], Noraini Philip[a], Nurul N. Azhari[a], Bashiru Garba[a,b], Siti N. Masri[a], Zamberi Sekawi[a], Vasantha K. Neela[a,*]

PLOS NEGLECTED TROPICAL DISEASES

RESEARCH ARTICLE

Diagnostic accuracy of genetic markers and nucleic acid techniques for the detection of *Leptospira* in clinical samples: A meta-analysis

Jia-Yong Lam[1], Gary Kim-Kuan Low[2], Hui-Yee Chee[1*]

Research Groups: COVID-19 research, diagnosis and consultation

USAID-MyOHUN COVID-19 Tranche fund

USAID FROM THE AMERICAN PEOPLE | SEAOHUN Southeast Asia One Health University Network | MyOHUN MALAYSIA ONE HEALTH UNIVERSITY NETWORK

RESEARCH GROUP INITIATIVE

Research group 1

Nasopharyngeal sampling for refugees

Project Leader:
Assoc. Prof. Dr. Muhammad Hj. Mohd Isa
Grant:
COVID-19 Supplementary Fund
Sponsor:
United States Agency for International Development (USAID).
Total amount:
RM 100,000.00
Duration of the project:
6 Months (End project date: 30th Sep 2021)


Assoc Prof Dr Muhammad Mohd Isa (K)


Prof Dr Maha Abdullah


Dr Iskasymar Itam @ Ismail

Research group 2

Laboratory detection of SARS-CoV-2 on refugee sample

Project Leader:
Assoc. Prof. Dr. Chee Hui Yee
Grant:
COVID-19 Supplementary Fund
Sponsor:
United States Agency for International Development (USAID).
Total amount:
RM 140,537.00
Duration of the project:
6 Months (End project date: 30th Sep 2021)


Assoc Prof Dr. Chee Hui Yee (K)


Prof Dr. Syafinaz Amin Nordin


Assoc Prof Dr Leslie Than Thian Lung


Dr. Narcisse Mary Sither Joseph


Dr. Azmiza Syawani Jasni

Research group 3

Knowledge, attitude and practices level of COVID-19 among refugees who seek COVID-19 test in HPUPM

Project Leader:
Dr. Tengku Zetty Maztura Tengku Jamaluddin
Grant:
COVID-19 Supplementary Fund
Sponsor:
United States Agency for International Development (USAID).
Total amount:
RM 100,000.00
Duration of the project:
6 Months (End project date: 30th Sep 2021)


Dr Tengku Zetty Maztura Tengku Jamaluddin (K)


Assoc Prof Dr Malina Osman


Assoc Prof Dr Siti Norbaya Masri


Assoc Prof Dr Niazlin Mohd Taib


Dr Rosni Ibrahim


Dr Siti Zulaikha Zakariah


Dr Nur Raihana Ithnin


Assoc Prof Dr Muhammad Mohd Isa


Dr Chew Shu Yih


Ms Norliza Bahtiar Affendy

Research group 4

Knowledge, attitude and practice level of COVID-19 among refugees who seek COVID-19 test in HPUPM

Project Leader:
Prof. Dr. Syafinaz Amin Nordin
Grant:
COVID-19 Supplementary Fund
Sponsor:
United States Agency for International Development (USAID).
Total amount:
RM 120,000.00
Duration of the project:
6 Months (End project date: 30th Sep 2021)


Prof Dr. Syafinaz Amin Nordin (K)

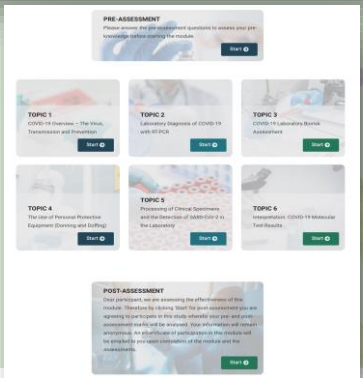

Assoc Prof Dr. Chee Hui Yee


Dr Nur Amelina Nasharuddin


Dr. Narcisse Mary Sither Joseph


Dr. Azmiza Syawani Jasni

COVID-19 Laboratory Online Module (COVILAM)



Awards:

The Best Department Awards Research and Innovation 2017, 2018, 2019 & 20 Tengku Zetty Maztura 20.

Copyrighted and awards won at International University Carnival on E-learning Learning tools Gamification, AR,


ITEX'21

Certificate of Award

This is to certify that

PROFESSOR DR SYAFINAZ AMIN NORDIN,
ASSOCIATE PROFESSOR DR. HASLINDA HASHIM,
DR. SHARIFAH SAKINAH SYED ALWI,
MISS STELLA GANAPATHY PILLAY,
MISS NURUL FARZANA ISMAIL

UNIVERSITI PUTRA MALAYSIA

MALAYSIA

has been awarded the

ITEX 2021 GOLD MEDAL

for the invention

PUTRA AMAZING AGAR

at the

32ND INTERNATIONAL INVENTION, INNOVATION & TECHNOLOGY EXHIBITION 2021
KUALA LUMPUR, MALAYSIA
13 – 14 DECEMBER 2021

Academician Emeritus Professor
Tan Sri Datuk Dr Augustine Ong Soon Hock
President
Malaysian Invention and Design Society

Professor Dr. Syafinaz Amin Nordin and her team have been awarded the Gold Medal in the 32nd International Invention, Innovation & Technology Exhibition 2021 held on 13-14 December 2021 at Kuala Lumpur.

The 'Putra Amazing Agar' is a specialized invention to act as a 'ready-made agar' which promotes the growth of pathogens from sterile body fluid samples and has a potential to overcome any obstacles when the traditional agar is used.

Top 1% Q1 Journal Publication among faculty members.

Current Research Project:

STAFF NAME	PROJECT ID	RESEARCH TITLE	GRANT NAME (SCIENCEFUND/FRGS ETC.)	AMOUNT RECEIVED
Prof. Dr. Zamberi Bin Sekawi	5539240	Strategic integrated measure on advocating IDEAS2: A comprehensive fundamental, technical and public health approaches	MRUN	467,500.00
		Influenza Disease burden and cost estimates in Malaysia	Sanofi Pasteur	232,245.00
	9614200	Prevalence of Occult Hepatitis B Infection (OBI) among Chronic Kidney Diseases Patients in Serdang Hospital in 2018	GERAN PUTRA	20,000.00
Assoc. Prof. Dr. Vasantha Kumari Neela		Deciphering virulence of novel pathogenic Leptospira species isolated from environment and small mammals in Malaysia in hamster models	FRGS	115,900.00
	PRGS 2020-1	Lepto IFA IgG-IgM: Indirect immunofluorescent assay (IFA) for the detection of IgG and IgM antibodies against Leptospira	PRGS	145,000.00
Prof. Dr. Rukman Bin Awang Hamat	UPM/800-4/11/MRUN/2018/5539240	Fundamental behavioural study on Infectious diseases in community (sub projek 1 under IDEAS2 MRUN)	MRUN Fasa 2	150,000.00
	9656600	Development of Loop-Mediated Isothermal Amplification (LAMP) for Invasive Streptococcus pyogenes Isolates Detection	GERAN PUTRA	25,000.00
	5540418	Determining the diversity of antimicrobial resistance bacteria and their resistance genes via One Health approach in manure, soil, vegetables, irrigation water and farm workers in selected organic farms via molecular method: a microbial risk assessment towards improving Malaysian good agriculture practice (MyGAP).	FRGS	170,000.00
	(6300282)	Knowledge and health beliefs as determinants for catfish consumption among communities	Private Company	26 000.00
	BPC I-2021(06)	Investigation the prior exposure of the conventional and organic chicken eggs to Acinetobacter species, Pseudomonas aeruginosa, Klebsiella pneumoniae and Corynebacterium diphtheria	IMU	4,000.00
Prof. Dr. Syafinaz Binti Amin Nordin		Phenotyping and the genotyping characterization of invasive of GBS isolated from human and fish in Malaysia	GPB	96,000.00
	9611600	The Prevalence and Factors Associated with Chlamydia trachomatis Infection among Subfertile Couples of Lembaga Penduduk dan Pembangunan Keluarga Negara (LPPKN) Subfertility Clinic from Feb 2018 untul Feb 2019	GERAN PUTRA	23,500.00
	9003327	Tween 80 incorporated media as a solution for high culture negative rate in CAPD-associated peritonitis patients	GERAN PUTRA	60,000.00
		COVILAM (COVID-19 Laboratory Module): A training module for the laboratory testing and the interpretation of the results for coronavirus disease (COVID-19)	MyOHUN	120,000.00
		Putra Amazing Agar – A Tween 80 Added Blood Agar as a Solution For High Culture Negative Rate in Sterile Body Fluid Samples	GERAN PUTRA	100,000.00

Current Research Project:

STAFF NAME	PROJECT ID	RESEARCH TITLE	GRANT NAME (SCIENCEFUND/FRGS ETC.)	AMOUNT RECEIVED
Assoc. Prof. Dr. Niazlin Binti Mohd Taib	IPSR/RMC/UTARRF/2019-C1/Y03	"Knowledge and awareness of hand, foot and mouth disease among parents in Malaysia: A community-based cross sectional survey."	UTARRF	28,780.00
	9690500	Molecular Factors of Human Cytomegalovirus that Influence the Effect of Antiviral Therapy in Immunocompromised Patients	GP-IPS	25,000.00
Dr. Tengku Zetty Maztura Binti Tengku Jamaluddin	FRGS/1/2021/SKK04/UCSI/02/1	Integrative Elucidation of Socio-Ecological Drivers of Antimicrobial Resistance Emergence and Transmission at the Human-Animal-Environment Interface	FRGS	114,500.00
	FRGS/1/2019/SS09/UITM/02/7	Malaysian Sign Language(MySL) as a Third Language in Creating Community Inclusive Communication(CIC) to Safeguard Mental Health Among the Deaf.	FRGS	90,700.00
		Knowledge, attitude and practices level of COVID-19 among refugees who seek COVID-19 test in HPUPM	MyOHUN	100,000.00
		Implementation of standardized bioinformatics practices, pipelines, and data structures in AMR sequencing laboratories in LMICs.	PHA4GE 2021: AMR Sub grant (AMR-SG-02)	20,000 (USD), RM 84,733.245
Assoc. Prof. Dr. Siti Norbaya Binti Masri	9648700	Molecular Identification of Fungi Causing Tissue Mycoses from Formalin Fixed Paraffin Embedded (FFPE) Tissue Sample in Serdang Hospital from Year 2014 to 2017	GP-IPS	25,000.00
Dr. Siti Zulaikha Zakariah	9679300	Characterisation and Succession of the Hospital Microbiome before and after Human Occupancy in a Newly-Opened Hospital	GP-IPM	60,000.00
Dr. Rosni Ibrahim	9680700	Epidemiology and Microbiological Profile of Microbial Keratitis in Selected Government Hospitals Southern Region in Malaysia	GP-IPS	25,000.00
Assoc. Prof. Dr. Leslie Than Thian Lung	5534100	Development of prototype of palm oil-based probiotics pessary for vaginal health	PRGS	124,650.00
	9612400	Development of Loop-Mediated Isothermal Amplification (LAMP) Assay for Detection of Candida glabrata	GP-IPS	25,000.00
		Effects of physiologically relevant alternative carbon sources on cell wall properties and host-pathogen interactions in Candida glabrata	GPB	100,000.00
		Effect of physiologically relevant alternative carbon sources on cell wall properties and host-pathogen interactions in Candida glabrata	FRGS	168,400.00
Assoc. Prof. Dr. Chee Hui Yee	9678200	Establishment of Loop-Mediated Isothermal Amplification (LAMP)- based Biosensor for Detection of Human Pathogenic Leptospira spp.	GP-IPS	25,000.00
		Clinical evaluation of multi-nation, multi-center case study for SARS-CoV-2 variant analysis	Seegene Inc, Korea	USD10,000 (RM42,000)
	9708000	Whole genome sequencing as a tool to indetify potential variants of SARS-CoV-2 from retrospective samples	GPB	77,000.00

Current Research Projects:

STAFF NAME	PROJECT ID	RESEARCH TITLE	GRANT NAME (SCIENCEFUND/ FRGS ETC.)	AMOUNT RECEIVED
Dr. Azmiza Syawani Jasni	9650100	Investigating the potential of Elateriospermum tapos (E. tapos), Plant-based source of omega-3 fatty acids as a conjugation inhibitor for prevention of antibiotic resistant gene transfer	GERAN PUTRA (FAST TRACK)	50,000.00
		Elucidating the Inhibitory Activity of Tualang Honey in Bacterial Conjugation for Preventing Dissemination of Antibiotic-Resistant Bacteria	FRGS	114,680.00
Dr. Narcisse Mary a/p Sither Joseph Vesudian	9690700	Investigation of Immunogenic T Cell Epitopes in Leptospiral Outer Membrane Proteins Using Immunoinformatics Approach to Stimulate Host Immune Response	GP-IPM	54,000.00
Dr. Norashiqin Misni	5540249	Exploring the stability and effectiveness of Citrus aurantifolia fruit peel (CAFP) – synthesized AgNPs encapsulated with polyethylene glycol (PEG) against immature stage of Aedes aegypti.	FRGS	137,330.00
Dr. Nur Raihana Ithnin	GP-IPM/2020/9686100	Prevalence of Intetinal Microsporiosis, Potential Risk Factors andMolecular Epidemiology characteristics of Microsporidia amongst Refugee Children in Selangor	GP-IPS	40,000.00

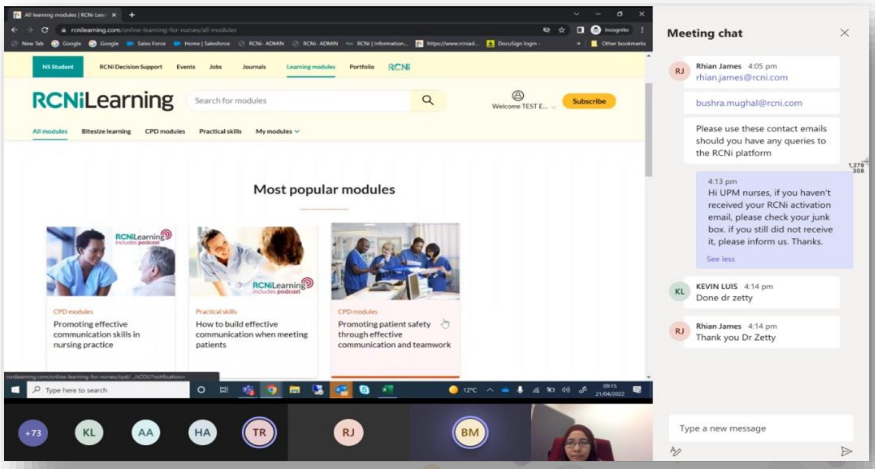
HIGHLIGHT Current Research Project:

Independent Medical Education Grant
31st March 2022-30th March 2023

Collaborative grant:
Prinsipal Investigator: Dr Tengku Zetty Maztura Tengku Jamaluddin

Members:
Prof Dr Syafinaz Amin Nordin
Assoc. Prof. Dr Siti Norbaya Masri
Assoc. Prof. Dr Niazlin Mohd Taib
Assoc. Prof. Rosni Ibrahim
Assoc. Prof. Siti Zulaikha Zakariah

Pilot study, WIP:
MDYR2 students Research Project
Evaluated 3 modules.
176 nurses involved.
82 nurses completed the study.



Onboarding call RCNi UK and Nursing Unit, HPUPM

PROMOTING POSITIVE PERCEPTIONS AND MOTIVATION FOR FACING CHALLENGES, IMPROVING CLINICAL RESEARCH, and CULTIVATING RESEARCH & NETWORKING.

In promoting positive perceptions and motivations for improving clinical research and cultivating research, the department has few strategies that had been implemented:

1. Provide interest and research groups and;
2. Having internal collaboration worldwide including

Putra Infectious Diseases Research Group (Putra IDRes)

Aim: To address these issues through strategic, innovative and cutting-edge fundamental and applied research focusing on multiple aspects of infectious diseases such as transmission, diagnosis, therapeutics, prevention and control.
Importance: finding solutions to issues or threats posed by infectious diseases.

Achievements:
- Active in research areas involving multidrug-resistant organisms (MDROs), respiratory, vector-borne and hepatitis viruses, fungal pathogens, helminths and infectious diseases public health as well as One Health.
- Published in Top 1% and 10% in their respective fields with patents.
- Awarded grant from Long Term Research Grant Scheme (LRGS) which focuses on leptospirosis.

Moving forwards: to bring the research to greater heights by having high quality and more impactful research through strategic collaboration with researchers from top universities and industries around the world.

Members members with clinical and medical microbiology backgrounds as well as members from other branches of medical fields like paediatric, medicine and dermatology.

- Prof. Dr. Syafinaz Binti Amin Nordin (Leader)
- Prof. Dr. Zamberi Bin Sekawi
- Prof. Dr. Rukman Bin Awang Hamat
- Assoc. Prof. Dr. Vasantha Kumari Neela
- Assoc. Prof. Dr. Malina Binti Osman
- Assoc. Prof. Dr. Niazlin Binti Mohd Taib
- Assoc. Prof. Dr. Siti Norbaya Binti Masri
- Assoc. Prof. Dr. Chee Hui Yee
- Assoc. Prof. Dr. Leslie Than Thian Lung
- Dr. Tengku Zetty Maztura Binti Tengku Jamaluddin
- Dr. Siti Zulaikha Zakariah
- Dr. Rosni Ibrahim
- Dr. Ngah Zasmy A/L Unyah
- Dr. Azmiza Syawani Jasni
- Dr. Narcisse Mary a/p Sither Joseph Vesudian
- Dr. Norashiqin Misni
- Dr. Nur Raihana Ithnin
- Assoc. Prof. Dr. Intan Hakimah Ismail
- Assoc. Prof. Dr. Wan Syamimee Wan Ghazali
- Dr. Sithra A/P Rengasamy
- Dr How Kang Nien

Malaysian Society of Infectious Diseases and Chemotherapy

MMIG MALAYSIAN MYCOLOGY INTEREST GROUP

Malaysian Mycology Interest Group (MMIG) under Malaysian Society of Infectious Diseases and Chemotherapy (MSIDC)

Aim: Promotes knowledge and awareness of fungal infections among healthcare workers.

Achievements:
- Involved in preparing and proposing antifungal usage guidelines for MOH.
- Compiling national antifungal susceptibility testing data for molds.

Moving forwards: Collaborating with Asia Fungal Working Group (AFWG), a working group of International Society for Human and Animal Mycology (ISHAM) (in progress).

Members:
- Assoc. Prof. Dr. Siti Norbaya Masri (Secretary)
- Assoc. Prof. Dr. Leslie Than Thian Lung (Training Committee)

Antimicrobial Resistance Research Group, University Malaya

Aim: To encourage collaborations in antimicrobial resistance studies across academic institutions/disciplines.

Achievements:
- Originally started from collaborative inter-university research on Surgical Site Infections sponsored by industrial grant, Shionogi Pte Ltd.

Moving forwards: To coordinate and conduct antimicrobial resistance studies involving bacterial infections in Malaysian hospitals.

Members:
- Sazalv bin Abu Bakar (Interim Leader, UM)
- Cindy Teh Shuan Ju, UM
- Sasheela A/P Sri La Sri Ponnampalavanar, UM
- Rina A/P N. Karunakaran, UM
- Kartini binti Abdul Jabar, UM
- Ngoi Soo Tein, UM
- Azian Harun, USM
- Siti Suraiya Md Noor, USM
- Ramliza Ramli, UKM
- Zalina Ismail, UKM
- Sharifah Azura Salleh, UKM
- Tengku Zetty Maztura Tengku Jamaluddin, UPM
- Niazlin Mohd Taib, UPM
- Siti Norbaya Masri, UPM
- Azmiza Syawani Jasni, UPM
- Chong Chun Wie, Monash University Malaysia
- Victor Lim Kok Eow, IMU
- Anis Ahmed Khan, IMU

PROMOTING POSITIVE PERCEPTIONS AND MOTIVATION FOR FACING CHALLENGES, IMPROVING CLINICAL RESEARCH, and CULTIVATING RESEARCH & NETWORKING.

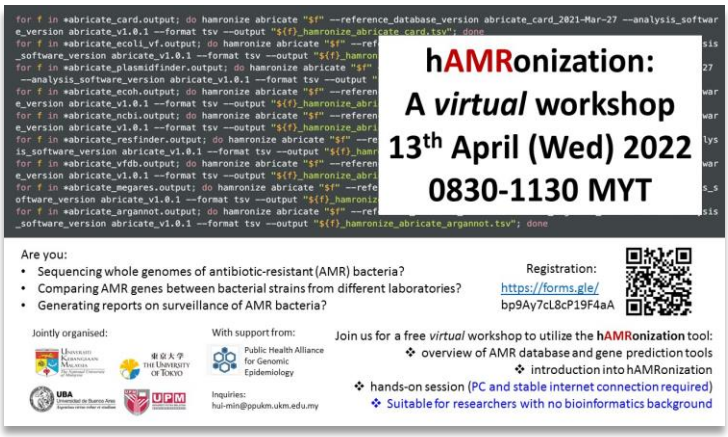
International Collaboration

No	Department Member	Internationalization
1.	Prof. Dr. Zamberi Sekawi	• Global Leptospirosis Environmental Action Network (GLEAN)
2.	Prof. Dr. Rukman Awang Hamat	• US Naval Medical Research Unit (NAMRU-2), Singapore.
3.	Prof. Dr. Syafinaz Amin Nordin	• National University of Singapore, Singapore • University of Otago, New Zealand
4.	Assoc. Prof. Dr. Siti Norbaya Masri	• University Hospital Cologne, Germany
5.	Assoc. Prof. Dr. Vasantha Kumari Neela	• Pasteur Institute, France • University of Glasgow, UK
6.	Assoc. Prof. Dr. Chee Hui Yee	• University of Cambridge, UK • World Health Organisation • Seegene Inc, Korea • The Association of Southeast Asian Institutions of Higher Learning (ASAIHL) • United Nations High Commissioner for Refugees
7.	Dr. Tengku Zetty Maztura Tengku Jamaluddin	• Nagasaki University, Japan • Juntendo University, Japan • Public Health Alliance for Genomic Epidemiology (PHA4GE)
8.	Assoc. Prof. Dr. Leslie Than Thian Lung	• Medical Research Council for Medical Mycology (MRC CMM) at the University of Exeter, UK (previously University of Aberdeen, UK) • McGovern Medical School at the University of Texas Health Science Center at Houston (UTHealth Houston) • University of Manchester, UK.

NAMRU-2 Visit to FMHS & HPUPM, 26th April 2022

Public Health Alliance for Genomic Epidemiology

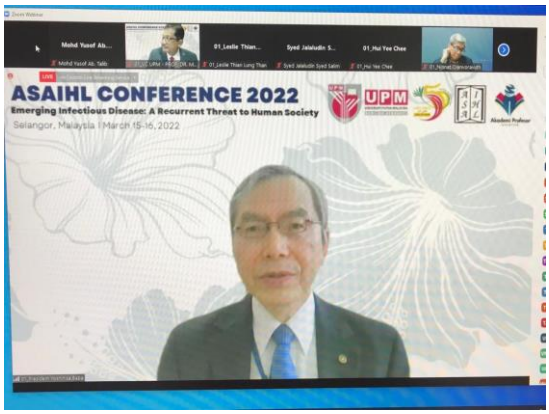
PHA4GE AMR Sub-Grant USD20,000.
UKM, UBA, Tokyo University & UPM.

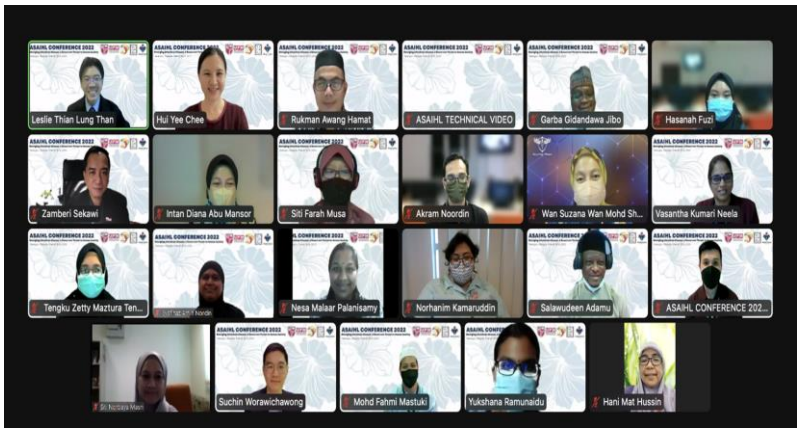


hAMRonization platform briefing by PHA4GE

Invited to present at the Grand Challenges Annual Meeting 2021

The Association of Southeast Asian Institutions of Higher Learning (ASAIHL) Conference 2022





More than 600 registered participants from 21 countries

Mentoring and Inclusiivity for all department members:

With aim to apply grants under university scheme and Ministry of Higher Education (MOHE), newly appointed staff will be assigned with a mentor for professional development especially for research and academic.

Apply local and international grants voluntarily in collaboration with industries such as:

- Pfizer Inc USA grant for Invasive Fungal Infections, 2 applications submitted
- NAMRU-2 and UM collaborative visit
- Malaysian Research University Network Young Researchers Grant (MY-RGS) collaboration with AMR UM group members, extend involvement to other department members also
- Establishing connections via webinars, conferences e.g. ASAIHL 2022, JIMN linkages, etc.

Challenges in conducting research:

- Research are done in piecemeal rather than as a whole.
- Inclusiveness will promotes a passive researcher in the department if they are not actively engaged in the research projects.
- Internal and external conflict do exist when overstepping delineation and boundaries between clinical work and research activities.
- Long process of getting ethical clearance due to amendment needed of the submitted proposal will effect the study commencement.
- Researchers need to undertook risk of project delay, withdrawal of grant by grantor, give up on collaboration due to official requirement such as:
- MOA required for grant and procurement of reference material from MOH.
- Long process, warranting many layers of reviews by faculty, +/- RMC, legal, +/- JPU, +/- VC signature.

DEPARTMENT OF ORTHOPAEDIC – EXTRAORDINARY SERVICES.

Background:

The Department of Orthopedic is made up of eight units are as follows: Hand & Microsurgery, Spots Surgery, Arthroplasty Surgery, Spine Surgery, Paediatric Orthopaedic, Advance Trauma Surgery, Foot & Ankle Surgery, Arthroplasty & Oncology Surgery. Presently the department is running the following undergraduate programs which are Orthopaedics Senior Orthopaedics (SPK4912) and Introductory Orthopedics (SPK3914). In 2013 the department started to offer post- graduate program namely Master of Surgery (Orthopaedics). The program's main objective is to produce Orthopaedic specialists to meet the high demand of public and private sector. Apart from undergraduate teaching, service and community work, members of the department are also involved in postgraduate teaching and research. Orthopaedic department has started its services in Hospital Pengajar Universiti Putra Malaysia (HPUPM) since early year 2020. Our vision is to become one of an important department in HPUPM and giving our full commitment to deliver extraordinary services to our patients.

CRAMs Member: Dr. Sanjiv Rampal A/Lekhraj Rampal

REMARKABLE RESEARCH ACTIVITIES AND OUTPUTS

Past Research Projects:

YEAR	NUMBER OF PUBLICATIONS/YEAR
2016	6
2017	7
2018	5
2019	5
2020	18
2021	16
2022	2 - Ongoing

Current Research Projects:

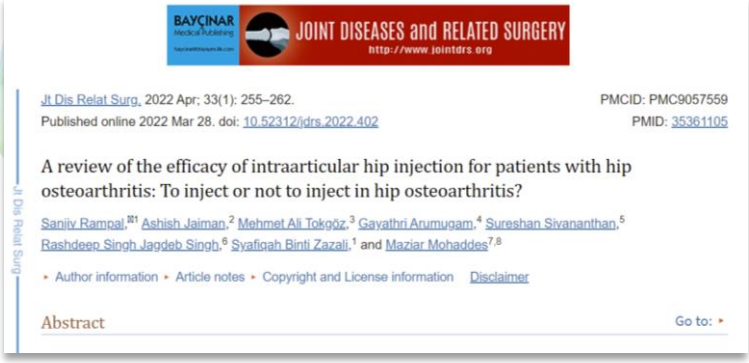
RESEARCHER	TITLE
Dr. Sanjiv Rampal	Effect of RGTA and GCSF on superficial digital flexor tendon repair and rehabilitation in a goat model-Mr Colin with Vet UPM.
	Empirical Antibiotics in Necrotising fasciitis systemic review.
	Empirical Antibiotics in Management of Diabetic foot Systemic Review.
	Systemic review on injuries suffered while playing soccer.
	Infrapatellar Branch of Saphenous Nerve During Total Knee Arthroplasty Among Asian Population: Cadaveric Study Collaboration with Anatomy Department
Dr. Azamuddin Alias	Normal Anatomical Location Of Distal Fibula Within The Syndesmotic Joint In True Lateral Ankle Radiograph : A Measurement Ratio Of Distal Fibula Within The Syndesmotic Joint
	The association of clinical and electrophysiological findings in carpal tunnel syndrome and its concurrent compressive neuropathy. A cross sectional prospective study in tertiary centres in Malaysia

Current Research Projects (Grant):

RESEARCHER	TITLE	SOURCE OF GRANT AND AMOUNT GRANTED
Prof. Dr. Manohar Arumugam	Role of Music to Alleviate Pain and Anxiety during Post-Operative Period in Patients with Femur Fracture at Hospital Serdang.	Grant Putra RM50,000
	Whole-Exome Scanning for Variants and the Aetiology Associated with the Development of Dupuytren's Contracture Using Next Generation Sequencing.	FRGS RM166,900
Dr. Fahrudin Che Hamzah	The Ability of Povidone-Iodine on Implant Coated with Staphylococcus Aureus Biofilm.	Geran Putra IPS RM20,000
Dr. Sanjiv Rampal	Cadaveric Study of the Anatomical Course of Infrapatellar Branch of Saphenous Nerve in Relation to Midline Skin Incision for Total Knee Arthroplasty.	Geran Putra IPS RM25,000
Dr. Imma Isniza Ismail	Incidence of Corona Mortis in Multiracial Asian Hemipelvis Cadavers in Malaysian Tertiary Hospital.	Geran Putra RM22,000
Dr. Collin Looi Seng Kim	Effect of Regenerating Agents and Granulocytes-Colony Stimulating Factors on Superficial Digital Flexor Tendon Repair and Rehabilitation in a Goat Model.	Geran Putra IPM/ RM55,000

Past Research Achievements:

- 2 CIJ publications published
  A review of the efficacy of intraarticular hip injection for patients with hip osteoarthritis: To inject or not to inject in hip osteoarthritis? Q3 journal
- Complementary Medicine a Costly Risk in Management of Chronic Knee Osteoarthritis?Q3 Journal


BAYÇINAR Medical Publishing
JOINT DISEASES and RELATED SURGERY
http://www.jointdrs.org

Jt Dis Relat Surg. 2022 Apr; 33(1): 255–262. PMCID: PMC9057559
Published online 2022 Mar 28. doi: 10.52312/jdrs.2022.402 PMID: 35361105

A review of the efficacy of intraarticular hip injection for patients with hip osteoarthritis: To inject or not to inject in hip osteoarthritis?

Sanjiv Rampal,[1] Ashish Jaiman,[2] Mehmet Ali Tokgöz,[3] Gayathri Arumugam,[4] Sureshan Sivananthan,[5] Rashdeep Singh Jagdeb Singh,[6] Syafiqah Binti Zazali,[1] and Maziar Mohaddes[7,8]

Author information • Article notes • Copyright and License information Disclaimer

Abstract Go to:


CASE REPORT

Complementary Medicine a Costly Risk in Management of Chronic Knee Osteoarthritis? A Case Report

Sanjiv Rampal[1], Sandra Maniam[2], Ho Yi Peh[1], Raghuman Sheriff Feroze[3], Manvikram Singh Gill[4], Navin Kumar Devaraj[5], Suresh Kumar Subbiah[6]

[1] Department of Orthopaedic, Faculty of Medicine and Health Sciences, University Putra Malaysia, 43400 Serdang, Selangor, Malaysia
[2] Department of Human Anatomy, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia
[3] Department of Orthopaedics, Asian Institute of Medical University (AIMST), Batu 3 , Bukit Air Nasi, Jalan Bedong-Semeling, 08100 Bedong, Kedah, Malaysia
[4] Pharmacy Unit, Tuanku Mizan Armed Forces Hospital, 3, Jalan 4/27a, Wangsa Maju, 53300, Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur, Malaysia
[5] Department of Family Medicine, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia
[6] Department of Biotechnology, Bharath Institute of Higher Education and Research (BIHER), Selaiyur, Tamil Nadu 600 073, India.

PROMOTING POSITIVE PERCEPTIONS AND MOTIVATION FOR FACING CHALLENGES, IMPROVING CLINICAL RESEARCH, and CULTIVATING RESEARCH & NETWORKING.

In doing the research, the department faced challenges in many ways like all researchers in the field. The top 3 mentioned challenges were:

- Less patients to write case series
- No emergency department –hence less patients
- No APC for publications fee

To overcome the challenges issues, they had shared a few pro active solution to improve the research activities in department such as:

1. Participating in multiple workshops on line including CRAM CRU online.
2. Grant Workshop Tomorrow.
3. Adding the APC cost in Grant proposal.
4. Collaborating with other universities for APC sharing.
5. Collaborating with private industry for clinical trials.

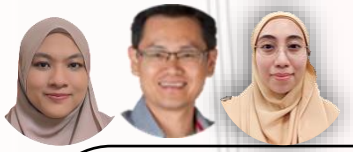
We would like to thank Assoc. Prof. Dr. Tengku Zetty Maztura and Dr. Sanjiv Rampal for the sharing. We hope that the sharing can transform tacit knowledge into explicit, written, and easily communicated knowledge for the right people to receive the right information at the right time. See you the next time!.

Check out more information about our CRU Associate Members (CRAMs) for the Year 2022/2023 Member on HPUPM website at CRAMs Members.

Be featured in our next series of RECRUS Newsletter by contacting us at CRU!

APPRAISALS IN META-JOURNAL HOUR 10

By: Nurul Iman Hafizah, BH Chew and Aazifah Ilham



The paper:
Rotating Night Shift Work and Healthy Aging After 24 Years of Follow-up in the Nurses' Health Study, doi: 10.1001/jamanetworkopen.2022.10450

Why was this study conducted?
Health care workers are commonly engaged in night shift work due to the nature of the job. Previous literatures have suggested that working at night may cause disruption of circadian rhythm, sleep disturbances and other behavioural changes that may lead to increased risk of chronic diseases, mental disorders, cognitive impairment and even mortality[1-7]. Existing studies[4, 7-10] on rotating night shift work have primarily focused on individual health outcomes, but its association with overall health is scarce.

In this prospective study, the longitudinal follow-up data from the Nurses' Health Study was used to examine the association of duration of rotating night shift work with heathy aging (as measured by a full spectrum of health outcomes) among women nurses.

How was it done?
The Nurses' Health Study is a prospective cohort study of 121 701 US registered nurses aged 30 to 55 years that was started in 1976. Women were a sked to report their history of rotating night shift work in 1988 which was the baseline of the present cohort study. In the primary analysis of the study, data on the overall health status including chronic diseases, physical function, mental health and memory function was analysed at the end of follow-up in the year 2012. This involved 46 318 women (age range 46 – 68 years). Those who had any of 11 main chronic diseases at baseline (n=17 872), missing information on rotating night shift work (n=13 552) or missing data on healthy aging phenotype in 2012 (n=12 300) were excluded from analyses. In addition, secondary analyses were conducted among 19 415 women who completed a cognitive function test when they reached 70 years of age in 2000. However, after excluding women with similar exclusion criteria in primary analysis, 14 273 women were included in the secondary analysis.

Watch the video recording on:
YouTube
Click [HERE] and don't forget to subscribe to our channel!

Assessment of Healthy Aging
Healthy aging was defined as survival to at least 70 years of age and no major chronic diseases and no impairment in cognitive function, physical function, or mental health. Table below outlines detailed description of healthy aging assessments in the study:

Dimensions	Primary analysis: Healthy aging in 2012	Secondary analysis: Healthy aging in 1995 – 2000
Assessment of chronic diseases	Clinical diagnoses of 11 major chronic diseases[a] were queried on biennial questionnaire since 1988 which were then confirmed by professional staff through medical record or pathology report review, telephone interview or supplementary questionnaire.	
Assessment of cognitive function	Assessed through the Structured Telephone Interview for Dementia Assessment using 7 questions. No impairment in memory was defined as at most 1 memory concern.	Telephone Interview of Cognitive Status (TICS) was administered. Score of <31 out of 4 was considered cognitively impaired.
Assessment of physical function	Assessed by 10 questions[b] in the SF-36. Impairment of physical function was defined as any of the following: • Limited at least a little on moderate activities or, • Limited a lot on more difficult physical tasks	
Assessment of mental health	Assessed using Geriatric Depression Scale-15 (GDS-15). Score range was 0 – 15, with lower scores indicating better mental health.	Evaluated by 5 questions[c] in the SF-36. A score between 1 (worst) and 6 (best) was assigned to each question. Good mental health as defined as a score >84.
Healthy aging	Defined as survival to at least 70 years of age and 4 health domains (no major chronic diseases and no impairment in cognitive function, physical function or mental health). Those who did not meet any of these criteria were defined as usual agers.	

Adapted from Table 1: Definition and dimensions of healthy aging (Shi, 2022)

[a]Major chronic diseases covers most common conditions that would significantly deteriorate human health, including cancer (except for nonmelanoma skin cancers), diabetes, myocardial infarction, coronary artery bypass graft surgery or percutaneous transluminal coronary angioplasty (as a surrogate for coronary artery disease), congestive heart failure, stroke, kidney failure, chronic obstructive pulmonary disease, Parkinson disease, multiple sclerosis, and amyotrophic lateral sclerosis.
[b]The 10 questions inquired about physical limitations in performing the following activities: moderate activities (eg, moving a table, pushing a vacuum cleaner, bowling, or playing golf); bathing and dressing yourself; walking 1 block; walking several blocks; walking more than 1 mile; vigorous activities (eg, running, lifting heavy objects, or strenuous sports); bending, kneeling, or stooping; climbing 1 flight of stairs; climbing several flights of stairs; and lifting or carrying groceries. Each question had 3 response choices: "Yes, limited a lot," "Yes, limited a little," or "No, not limited at all."
[c]The 5 questions were as follows: Have you been a very nervous person? Have you felt so down in the dumps nothing could cheer you up? Have you felt calm and peaceful? Have you felt downhearted and blue? And Have you been a happy person? There were 6 possible responses to each question ranging from none of the time to all of the time.

Assessment of Rotating Night Shift Work

In 1988, women were asked to report their total number of years of rotating night shift work (defined as at least 3 nights per month in addition to day and evening shifts) with 8 prespecified categories: Never, 1 to 2 years, 3 to 5 years, 6 to 9 years, 10 to 14 years, 15 to 19 years, 20 to 29 years and 30 years or more. Then, the duration of rotating night shift work was further categorized into 4 categories: Never, 1 to 5 years, 6 to 9 years and 10 years or more.

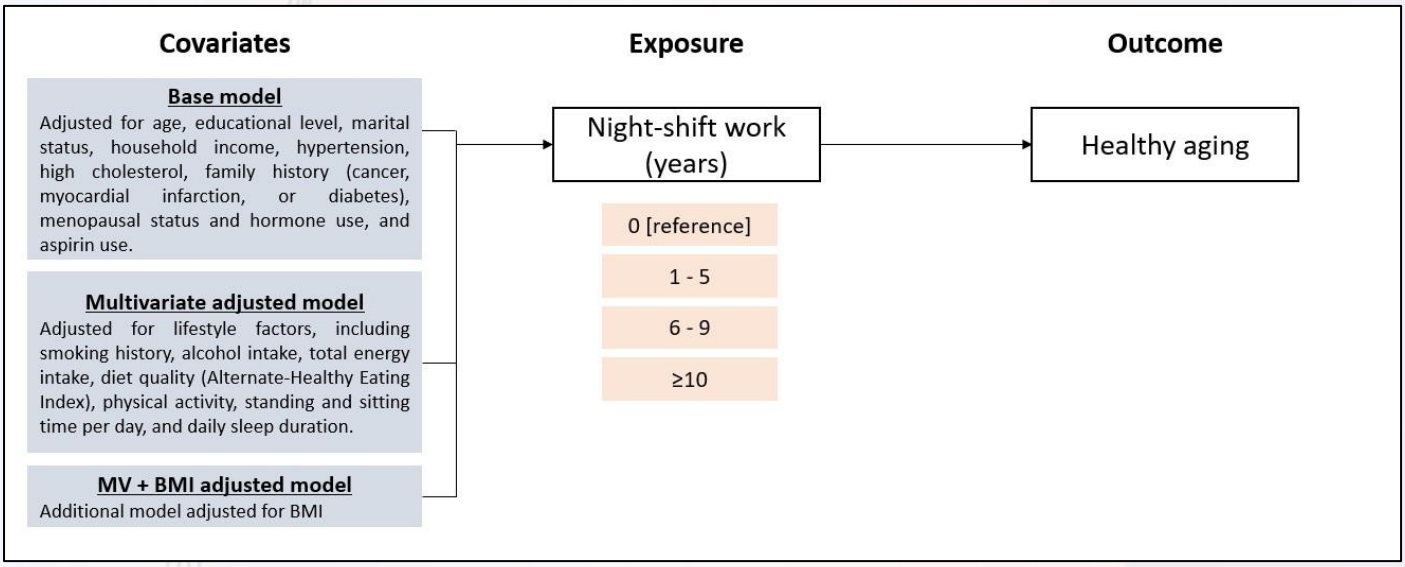
Assessment of Covariates

Information on a broad range of covariates was obtained:

Covariates	
Demographic characteristics	Marital status, race, educational level and household income
Lifestyle factors	Dietary data (total energy intake, alcohol and coffee consumption) Sleep behaviour (total hours of sleep and frequency of snoring) Physical activity (based on weekly Metabolic Equivalent of Task hours)
Family history	Cancer, myocardial infarction and diabetes
Clinical diagnoses	Hypertension and high cholesterol
Use of supplemental vitamins and aspirin	
Menopausal status and postmenopausal hormone use	

Statistical Analysis

Logistic regression models were used to estimate odds ratios (ORs) and 95% CIs for healthy aging across rotating night shift work categories (none, 1 – 5 years, 6 – 9 years and 10 years). An odd ratio smaller than 1 indicates decreased odds of healthy aging.



Data analyses were performed with SAS software, version 9.4 (SAS Institute Inc). A 2-sided $P<0.05$ was considered statistically significant.

What was the finding?

Baseline characteristics of participants

Out of 46318 women nurses included in the primary analyses, 17786 (38.4%) remained free of the 11 chronic diseases, 7150 (15.4%) had no impairment of physical function, 19654 (42.4%) had good mental health, and 23 169 (50.0%) reported no impairment of memory function. A total of 3695 participants (8.0%) met all criteria of healthy aging; the rest were usual agers. The mean (SD) age of study participants at baseline was 55.4 (6.1) years. A total of 45 300 participants (97.8%) were White, 562 (1.2%) were Black, 98 (0.2%) were American Indian, 347 (0.8%) were Asian, and 11 (0.02%) were Hawaiian. Majority of the participants, n= 27 480 (59.3%) reported having ever engaged in

rotating night shift work, and 5384 (11.6%) reported at least 10 years of rotating night shift work. Compared with women with no history of rotating night shift work, those with more years of rotating night shifts were slightly older (mean [SD] age, 56.7 [6.0] years vs 55.1 [6.1] years), had less education (master's or doctorate degree, 341 [7.1%] vs 1880 [10.8]), slept somewhat less (6.8 [1.1] hours per day vs 7.0 [1.0] hours per day), were more likely to be current smokers (1347 [25.0%] vs 3241 [17.2%] for those with no shift work) or regular snorers (538 [11.5%] vs 1451 [8.7%] for those with no shift work), had higher mean (SD) BMIs (26.4 [5.2] vs 25.1 [4.5] kg/m^2), had less median (IQR) sitting time (2.2 [1.1 - 4.4] hours per day vs 4.4 [1.1-4.4] hours per day), and were more likely to have hypertension (983 [18.3%] vs 2940 [15.6%]. Table 2 shows full age-adjusted baseline characteristics in 1988.

Primary analysis: Duration of rotating night shift work and healthy aging in 2012
Table 3 summarizes the ORs of healthy aging in 2012 associated with rotating night shift work. Compared with women without rotating night shift work, the adjusted ORs for healthy aging were the lowest among those with 10 years or more of rotating night shift work, 0.79 (95% CI, 0.69-0.91) (P = 0.001 for trend). Longer years of rotating night shift work were consistently inversely associated with 4 individual dimensions of healthy aging in the multivariate-adjusted model. The multivariate-adjusted ORs comparing women with 10 years or more of rotating night shift work vs women without rotating night shift work were 0.83 (95% CI, 0.77-0.89) for being free of major chronic diseases (P< 0.001 for trend), 0.87 (95% CI, 0.78-0.96) for having good physical function (P = 0.006 for trend), 0.87 (95% CI, 0.81-0.93) for having good mental health (P< 0.001 for trend, and 0.91 (95% CI, 0.85-0.97) for having good memory function (P< 0.001 for trend).

Secondary analysis: Duration of rotating night shift work and healthy aging in 1995 – 2000
Of the 14 273 participants included in the analysis of short-term healthy aging, 8515 women (59.7%) had none of the 11 chronic diseases, 3454 (24.2%) had no impairment of physical function, 5317 (37.3%) had good mental health, and 11 056 (77.5%) reported no impairment of cognitive function. A total of 1386 participants (9.7%) met all criteria of healthy aging in 1995 to 2000; the rest were usual agers.

The associations of rotating night shift work with healthy aging in 1995 to 2000 were consistent with the primary analysis (Table 4). Compared with women without rotating night shift work, the adjusted ORs for healthy aging were the lowest among those with more than 5 years of rotating night shift work: 0.72 (95% CI, 0.56-0.92) for 6-9 years of shift work, and 0.73 (95% CI, 0.60-0.89) for 10 years or more of shift work (P< 0.001 for trend). Rotating night shift work was also inversely associated with 4 dimensions of healthy aging. The adjusted ORs comparing women with 10 years or more of rotating night shift work vs women without rotating night shift work were 0.84 (95% CI, 0.75-0.93) for being free of major chronic diseases (P< .001 for trend), 0.81 (95% CI, 0.71-0.92) for having good physical function (P< 0.001 for trend), 0.92 (95% CI, 0.82-1.03) for having good mental health (P = 0.03 for trend), and 0.89 (95% CI, 0.78-1.00) for having good memory function (P = 0.02 for trend). Additional adjustment for BMI did not change these associations.

How much can we take out from this research/paper?

This study is another important report from the Nurses' Health Study. For this study, it is important because it looked into an important research question of the relationship between certain amount of rotating night shift work in nurses and health at 70-year-old. The exposure was clearly defined and the outcomes were also defined and objectively measured. Many potential confounding factors were included in the analysis where the causal effect of the exposure on the outcomes was adjusted for. Additionally, sensitivity analyses were conducted, even with mediation analyses and propensity scoring in reducing differences between the comparing groups showed the results are essentially the same at both the short- and long-term timepoints. The age-adjusted sociodemographic characteristics were also compared to those included in the study and reported to be similar (eTable 1).

If the self-report of health status was accepted, proportion of those excluded, limitations of possible changes in the exposure over the period of follow-up are inherent to any long cohort study would need to be carefully considered in interpretation and application of the findings. These appear acceptable with supports from scientific plausibility on the relationship of the exposure-outcome, different analytical approaches where potential influences of factors were accounted for as much as possible.

The results were indeed very interesting! They show that the risk of not having healthy ageing was at least 20-60% higher in those on rotating nigh shift work for more than 10 years in the past prior to retirement. The higher risks were also observed among those at lower duration of 6-9 years but those clocked in ≤ 5 years were generally had the similar risk to those who reported never on rotating night shift duty. One interesting result was the practice of ≥7.5 MET-h/wk buffered the added risk of ≥10 years of rotating night shift work on unhealthy ageing (eTable 5).

The statistical analysis is very well done. On top of primary analysis using multivariable logistic regression to control the confounder the researchers did sensitivity analysis using propensity score as covariate and stratified analysis. Sensitivity

analysis determine the robustness and certainty of result on the effect of independent variables on dependent variable under a given set of assumptions with a different mathematical modelling.

For the past 10 years, publications using propensity score in medical research have been increasing dramatically. The robustness of propensity score has been investigated and the comparison between the robustness with logistic regression as adjustment of covariate has been established. The robustness of the finding of logistic regression and propensity score depend on the number of events per independent variable (IV). If the number of events per IV ≥ 8, logistic regression is more robust and if <8, propensity score is better[10].

In this study, the analysis using logistic regression showed consistent result even after adjustment with propensity score as covariates. Interestingly, the ORs were observed to be drastically lower among those who had more than 10 years of night shift work (eTable 3). Propensity scores are a good alternative to control for imbalances when there are seven or fewer events per IV. For example, observational studies with seven or fewer events per IV could benefit from propensity score to optimize the covariate similarity in exposed and unexposed groups.

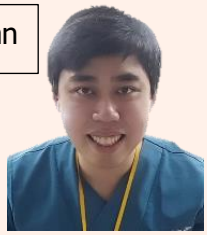
Lastly, there is the external validity that require both subjective and scientific reconciliation. However, we believe this consideration would not affect the results and more likely change the effect sizes according to the local background risk of healthy aging, gender, intensity of night shift work over the same service duration, and socio-political environment differences. Scientifically, the explanation of the effect of disrupted circadian rhythm on health is the same on human bodies disregard of ethnicity and gender.

References

1. Kervezee L, Kosmadopoulos A, Boivin DB. Metabolic and cardiovascular consequences of shift work: the role of circadian disruption and sleep disturbances. Eur J Neurosci. 2020;51(1):396-412. doi:10.1111/ejn.14216
2. Gao Y, Gan T, Jiang L, et al. Association between shift work and risk of type 2 diabetes mellitus: a systematic review and dose-response meta-analysis of observational studies. Chronobiol Int. 2020;37(1):29-46. doi:10.1080/07420528.2019.1683570
3. Rajaratnam SM, Howard ME, Grunstein RR. Sleep loss and circadian disruption in shift work: health burden and management. Med J Aust. 2013;199(8):S11-S15. doi:10.5694/mja13.10561
4. Torquati L, Mielke GI, Brown WJ, Burton NW, Kolbe-Alexander TL. Shift work and poor mental health: a meta-analysis of longitudinal studies. Am J Public Health. 2019;109(11):e13-e20. doi:10.2105/AJPH.2019.305278
5. Jørgensen JT, Karlsen S, Stayner L, Hansen J, Andersen ZJ. Shift work and overall and cause-specific mortality in the Danish nurse cohort. Scand J Work Environ Health. 2017;43(2):117-126. doi:10.5271/sjweh.3612
6. Marquié JC, Tucker P, Folkard S, Gentil C, Ansiau D. Chronic effects of shift work on cognition: findings from the VISAT longitudinal study. Occup Environ Med. 2015;72(4):258-264. doi:10.1136/oemed-2013-101993
7. Akerstedt T, Kecklund G, Johansson SE. Shift work and mortality. Chronobiol Int. 2004;21(6):1055-1061. doi: 10.1081/CBI-200038520
8. Vetter C, Devore EE, Wegrzyn LR, et al. Association between rotating night shift work and risk of coronary heart disease among women. JAMA. 2016;315(16):1726-1734. doi:10.1001/jama.2016.4454
9. Soledad Cepeda, Ray Boston, John T. Farrar, Brian L. Strom, Comparison of Logistic Regression versus Propensity Score When the Number of Events Is Low and There Are Multiple Confounders, American Journal of Epidemiology, Volume 158, Issue 3, 1 August 2003, Pages 280–287, https://doi.org/10.1093/aje/kwg115

AN INTRODUCTION TO IMPLEMENTATION RESEARCH

By: Dr. Yew Sheng Qian



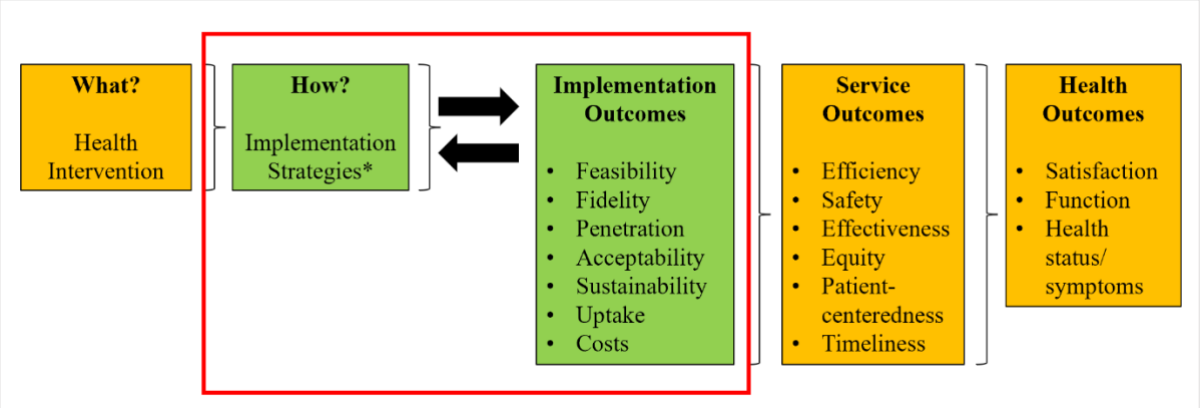
1) Why do we need implementation research?

- Health interventions conducted in clinical research often poorly implemented or even not implemented at all in clinical practice (1). As a result, many clinical research may not produce the expected or intended health benefits to the community in real life.

- Even when effectively implemented, these "evidence-based interventions" might not successfully produce the expected health benefits (2).

- This is mainly because clinical researchers usually focus only on the measurement of services and health outcomes (e.g., effectiveness, patients' satisfaction, symptomology, etc) but neglect the implementation strategies and the of implementation outcomes in their research methodology (Figure 1).

- As a solution, implementation research is introduced to ensure that health interventions are properly and effectively implemented in real world setting.



**Implementation strategies are defined as methods to enhance the adoption of a health intervention such as the use of job aids, provider education, or audit procedures.*

Figure 1: Implementation research methodology

2) What is the solution?

- Implementation research, also known as implementation science, dissemination research, or translational research, is defined as a scientific study of methods and strategies that facilitate the uptake of evidence-based practices and interventions into routine practices, and, hence, to improve the quality and effectiveness of healthcare and services (3).

- In simple words, implementation research closes the gap between "what we know" and "what we do" (often referred to as the know-do gap).

- Implementation research aims to identify and address barriers that slow or prevent the uptake of proven health interventions and evidence-based practices.

3) Who are the stakeholders in implementation research?

- Different from a "conventional" clinical research, implementation research focuses not only on the outcomes for patients but put great emphasis on the research benefits to the healthcare providers, organisation, and health policies.

- The conduct of an implementation research requires transdisciplinary teams that includes patients, community nurses, research assistants, clinicians, funders, policy-makers, etc.

4) How to conduct an implementation research?

- Various theoretical frameworks have been used to guide implementation research. Specifically, these theoretical frameworks are used to:

  ✓ Describe or guide the process of implementing research into practices
  ✓ Understand and/or explain what influences implementation outcomes
  ✓ Evaluate implementation strategies (4)

- Commonly used theoretical frameworks are:

  ✓ Consolidated Framework for Implementation Research (CFIR) framework (Figure 2). It classifies 39 implementation constructs into five domains, namely the
    1. outer setting,
    2. intervention characteristics,
    3. inner setting,
    4. implementation process, and
    5. characteristics of individuals,

    which are considered to be influential moderators or mediators of implementation outcomes (5).

  ✓ Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework (Figure 3). As the name suggests, this framework consists of five domains, namely
    1. Reach,
    2. Effectiveness,
    3. Adoption,
    4. Implementation, and
    5. Maintenance.

    Through these domains, the implementation of intervention can be assessed at both the individual (i.e., end-user) and organizational (i.e., delivery agent) levels (6).

- ✓ Promoting Action on Research Implementation in Health Services (PARIHS) framework (Figure 4). It comprises of three interacting domains, namely
  1. Evidence (i.e., knowledge from past research, clinical experience, local data, etc);
  2. Context (i.e., the quality of the environment or setting in which the research is implemented); and
  3. Facilitation (i.e., supports offered to help people to change their attitudes, habits, skills, ways of thinking, and working) (7).

  Successful implementation is a function of Evidence, Context, and Facilitation.

- ✓ Theory of Planned Behaviour
- ✓ Transtheoretical Model
- ✓ Health Belief Model
- ✓ Socioecological Model

- Application of these theoretical frameworks is meant to facilitate the identification of determinants of implementation, guide the selection of implementation strategies, and inform all phases of the research, including the constructs to be measured and the relationships among constructs to be tested.

- It is best to identify what are the ultimate aims of the intervention when choosing which framework is best suited to the intervention at hand.

- It may be acceptable to use more than one framework to progress implementation evidence into practice.

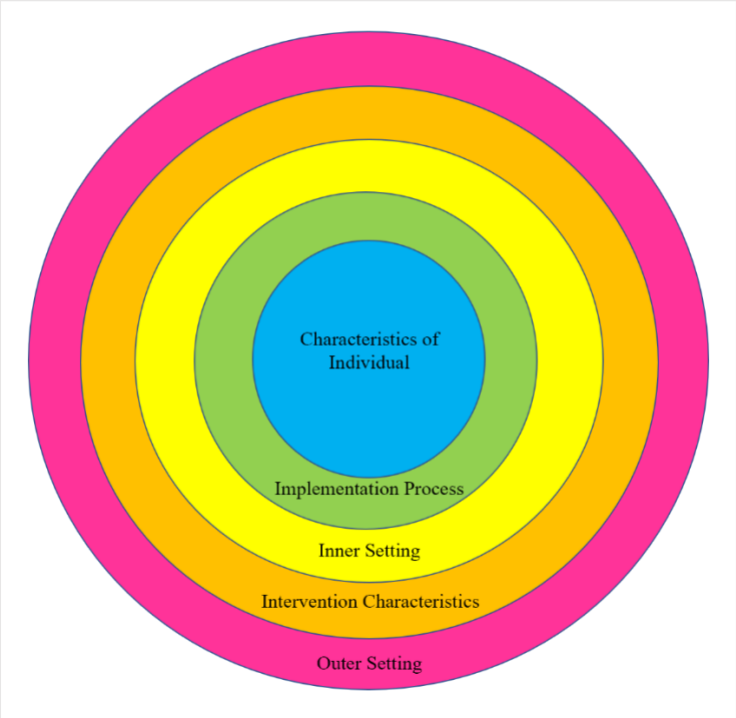


Figure 2: Consolidated Framework for Implementation Research (CFIR) Framework

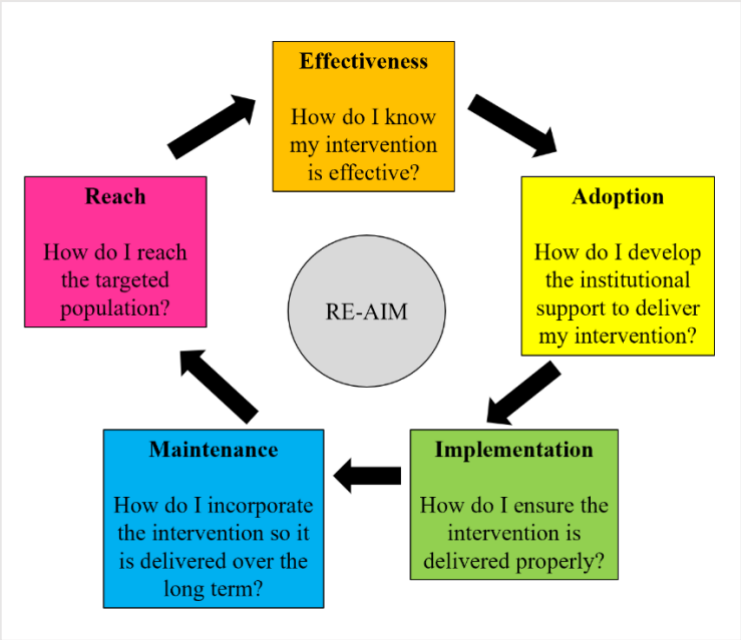


Figure 3: Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework

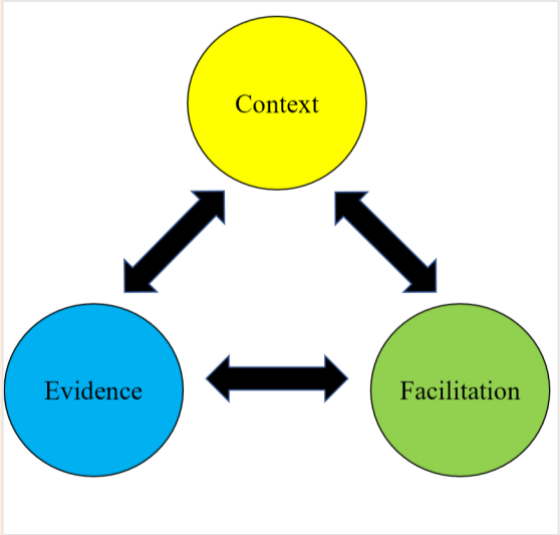


Figure 4: Promoting Action on Research Implementation in Health Services (PARIHS) framework

5) When to apply implementation strategies?

- In implementation research, implementation strategies can be applied in the pre-intervention (pilot) phase, intervention phase, and/or post-intervention (scale-up) phase (Figure 5).

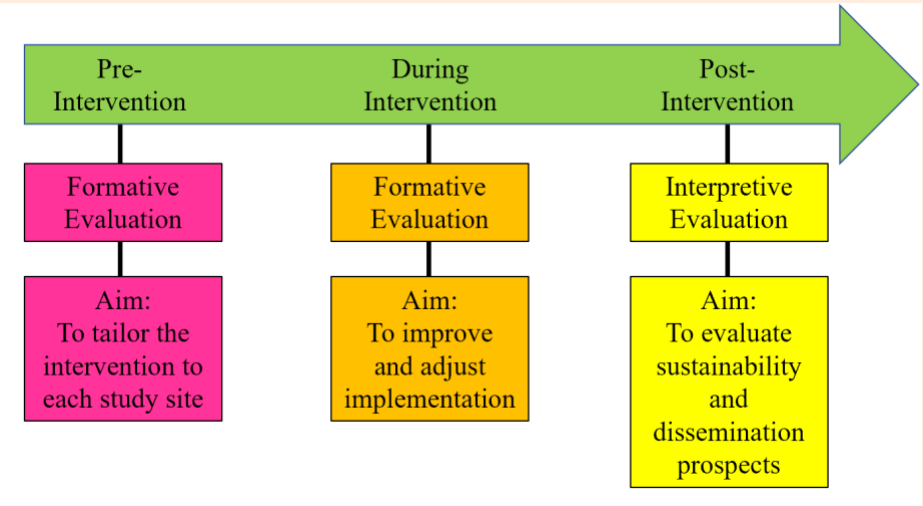


Figure 5: Phases of study when implementation strategies can be applied

6) How to measure implementation outcomes?

Example: "The Effectiveness of Motivational Interview in Improving Adherence to Anti-Hypertensive Medication – A Multicenter Study"

- In the example above, we are interested to know how the health intervention (i.e., motivational interview) can be implemented in real life setting to improve patients' adherence to anti-hypertensive medications.

- In this example, we will incorporate the RE-AIM framework to identify all possible barriers of motivational interviews using a mixed-methods approach. The barriers identified will subsequently allow implementation researchers to adjust and improve the health intervention (Table 1).

Table 1: The utilization of RE-AIM framework to identify the barriers of motivational interviews

Domains of RE-AIM	Quantitative Measurement (e.g., questionnaires, measure of clinical outcome, self-evaluation, etc)	Qualitative Measurement (e.g., semi-structured interview, observation, etc)	Barriers Identified
Reach *The extent to which an intervention reaches the target population*	• Determine the proportion of eligible target population who participated in the study • Use questionnaire to identify the reasons of declines across various sites	• What are the barriers to participation (i.e., reasons for not participating)? • Why is there a variation in the enrollment and	• Some patients refuse to participate due to language barriers • Some working patients refuse to participate due to lack of time

		decline rate across study sites?	• Unclear information provided to patients while taking informed consent prior to study
Effect *The extent to which the intervention accomplishes its goals*	• Measure the effects of the intervention on participants (e.g., measure any change in blood pressure readings over time, adherence rate to medication, improvement of symptoms, drug level in serum, etc)	• What are the mechanisms that lead to effectiveness? • What explains variation in outcome measures across various sites?	• Some participants do not fully understand the interview due to low education level • Some participants defaulted the motivational interview sessions due to logistic issues
Adoption *To what extent healthcare providers participate in the program*	• What is the proportion of healthcare providers participating in the program?	• Why some of the healthcare providers decline participation?	• Some doctors cannot cope with the already high patient load • Difficult to obtain ethics approval in some study sites • Some healthcare centers do not have the required facilities • Bad experience from previous study collaboration
Implementation *The extent to which the intervention was properly implemented*	• How consistent was delivery of intervention as intended? (fidelity) • Do all investigators reach similar level of competency?	• What were the modifications to the intervention and why did they occur? • What were the barriers to fidelity?	• Study participants have restriction to visit the clinic during the Covid-19 pandemic • Conversion of face-to-face motivational interview to interview over phone call due to

			the Covid-19 pandemic • Some investigators unable to deliver the motivational interview effectively due to poor communication skill
Maintenance (Usually measured after six months or longer) *The extent to which an intervention becomes part of routine practices and maintains effectiveness*	• Is the intervention sustained after the study period? • What proportion of participants drop-out after the study?	• Which component of the intervention is sustained? • What are the barriers to maintain the program? • Why participants drop-out after the study?	• Not enough funding to maintain the motivational interview • Both the doctors and patients feel that the motivational interview is time-consuming • Doctors have many other administrative commitments • Not enough consultation room (space) to deliver the interviews

7) Conclusion

- Implementation research is a relatively new and yet growing area in scientific investigation. It was introduced to ensure the translation of health interventions to real world.

- Various theoretical frameworks can be utilized to the identify the determinants of implementation, guide the selection of implementation strategies, and inform all phases of the research.

- Challenges in implementation research include the diversity of terminologies associated with implementation research in different part of the world, the presence of multiple theoretical frameworks, as well as the inconsistency or underuse of theoretical frameworks in implementation research.

References:

1. Eldh AC, Almost J, DeCorby-Watson K, Gifford W, Harvey G, Hasson H, et al. Clinical interventions, implementation interventions, and the potential greyness in between -a discussion paper. BMC Health Services Research. 2017;17(1):16.
2. Ioannidis JPA. Why Most Clinical Research Is Not Useful. PLOS Medicine. 2016:10.
3. Eccles MP, Mittman BS. Welcome to Implementation Science. Implementation Science. 2006;1(1):1.
4. Marita T. Translation Research in Practice: An Introduction. The Online Journal of Issues in Nursing. 2018;23(2).
5. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation Science. 2009;4(1):50.
6. Glasgow RE, Vogt TM, Boles SM. Evaluating the public health impact of health promotion interventions: the RE-AIM framework. Am J Public Health. 1999;89(9):1322-7.
7. Kitson A, Harvey G, McCormack B. Enabling the implementation of evidence based practice: a conceptual framework. Qual Health Care. 1998;7(3):149-58.

July 2022
Vol. 2 Issues 17
Page 375

AN INTRODUCTION TO MEDICAL AUDIT

By: Dr. Nur Aazifah Ilham

WHAT IS MEDICAL AUDIT?

According to National Institute for Clinical Excellence, medical audit is a **quality improvement procedure** aims to improve patient outcome and treatment by a systematic review of care in comparison to predetermined criteria and implementation of change. Selected aspects of the care's **structure**, **processes** and **outcome** will be systematically assessed against the predetermined standards. When necessary, adjustment is made at targeted person, group or service level and further monitoring is needed to ensure the improvement in healthcare delivery.

WHY DO WE NEED TO DO A MEDICAL AUDIT?

Medical audit is a proven methods to improve the quality of care. Medical audit helps in:

- Identifying and promoting best practice
- Improving patient care
- Providing details regarding service's level of quality
- Pointing out issues and offer assistance with remedies
- Enhancing communication and teamwork.

WHO SHOULD INVOLVE IN MEDICAL AUDIT?

An audit requires team work and involvement from policy maker to ensure the audit did not become a wastage. Selecting right team members is important to ensure that the audit process would run smoothly. All audit team members must be dedicated to the audit process and understand the method and purpose of conducting the audit.

WHAT IS THE DIFFERENCE BETWEEN RESEARCH AND MEDICAL AUDIT?

The goal of research is to produce **new knowledge** while audit is conducted to determine whether **a certain standard has been met by the service** provided.

Research	Audit
Generate new knowledge	Monitor and/or improve services
Defines best practices/standards	Benchmark against best practice/standards
Involves new intervention	Usually never involved new intervention
Well-defined selection criteria for participants	Recruitment representative of the patient target group
Potentially generalizable	Pertaining to local services
Ethics always required	Dependent on local governance

HOW ARE MEDICAL AUDITS CLASSIFIED?

Based on Donabedian et al, the following classification of audit is used for quality assurance.

- **Audit of structure**

Setting of care that being provided which include financial and other resources to human resources like the number of staff and skill level required as well as physical resources such as facilities and equipment.
Example: doctor/patient ratio, resource allocation, recording systems, collaboration within the practice and specialists, and practice management.

- **Audit of process**

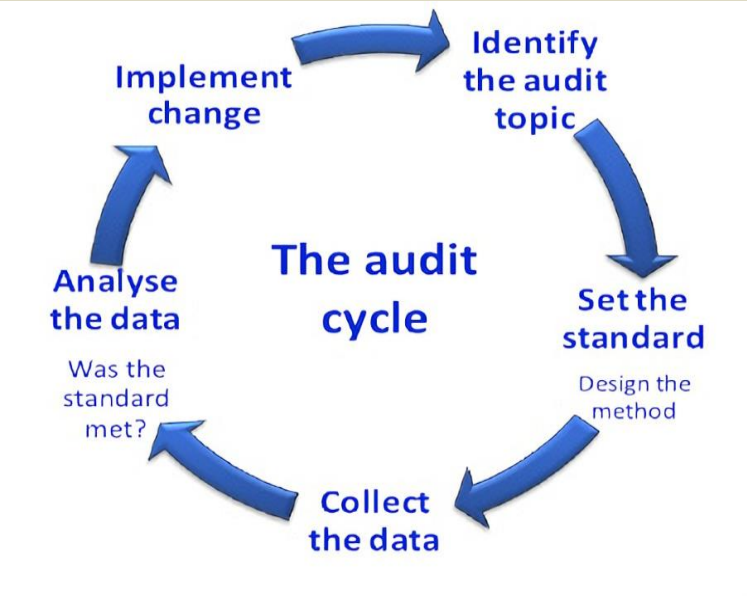
Audit of process denotes the action taken when providing and receiving care. It covers both the patient's activities in receiving and completing care as well as the practitioner activities in diagnosing disease and recommending treatment. The process can be broken into three categories: clinical performance, interpersonal performance and managerial performance.

- Audit of **outcome measures** are eventual results of the intervention and are the most relevant.

For example: audit on mortality after intervention with anti-hypertensive in stroke patient, reduction of lipid level after treatment of hyperlipidaemia and patient satisfaction after treatment.

AUDIT CYCLE

A medical audit can be viewed as a cycle in which different parts correspond to the assessment and improve the quality of a subject. Only by completion of the cycle, service quality can be assured.



HOW TO DO A MEDICAL AUDIT?

1. Choosing the topic

- Choosing an audit topic is the most important aspect of any audit activity. The topic should be **important** and **interesting**, otherwise, it would be difficult to maintain motivation.
- It is typically initiated following a complaint or perception that something is deficient in the practice or medical care. For example:
    - Complaint letter, incident report, direct observation

2. Agreeing on criteria

- Indicators, criteria, and standard of performance.
- A good **indicator** of care from a large number of elements that constitute the care.
- After the indicator is chosen, then we need to **define** it **precisely** so that we can say whether it is present or absent. Element defined precisely is referred to as **criteria**.

  For an example, assessing the quality of care related to providing hypertensive care involved many elements such as blood pressure recording, checking compliance, and checking cardiovascular risk factors.
- The chosen criteria must be both **reliable** and **valid**. A valid criterion must have a well-defined relationship to the quality and outcome of care and must be agreed upon by other members in the practice. A reliable criterion can be easily measured and with little disagreement.

  For an example, diastolic blood pressure levels equal to or below 90 mmHg (based on publication this level of blood pressure is associated with a decreased risk of stroke)

How do we get a reliable and valid criterion?
- Published research
- Clinical practiced guideline
- Professional and Expert opinion

The next step is setting a target level of performance.
- The target should be realistic
- Example in the case of blood pressure, achieving 100% of the target would not be feasible as there will be patient who is elderly and non-compliance with medication.
- Again, search for published researched/CPG/professional and expert opinion to look for a suitable target of performance.

3. Defining population

Usually, identify using registers- patient and staff. The target population is important for in determining sample size and data collection method.

4. Sampling

Two questions need to be addressed before selecting a sample.

1. How many samples size required?
2. How to select a representative sample?

There are a few determinants required to calculate sample size as below:

1. The degree of confidence wanted in the findings
2. Level of precision
3. Target performance
4. Number of population (proportion)
5. Resource constraints (time, access to data, costs)

Depending on the type of data being used, different methods can be used to determine sample size required. In audit, the sample size calculation is relatively straightforward. As such, it will be calculated using one or two proportion formula. (See example below:)

A primary care team is planned an audit of the treatment of hypertensive patients. They are treating 300 people for the illness, but they do not have time to go over all the documents. They choose one critical criterion and aim for a performance level of 70%. Those receiving therapy should have had their blood pressure measured and the result should have been below 150/90 mmHg on three occasions in the previous 12 months. They are prepared to accept a 5 percent sampling-related error. Based on the information given, the sample size required is 156.

It can be calculated using public domain software such as Epi Info or download the Excel file from University Bristol sample_size_calculator.xls (live.com). Example of calculation of sample size using the excel file as below:

to calculate sample size, amend variables in bold below		
N	**300**	population
p	**70%**	expected incidence
A	**0.05**	accuracy
c	**1.96**	c = 1.96 for 95% confidence, or 1.645 for 90% confidence
formula result =	155.47	
therefore n=	**156**	

Sampling techniques can be very basic to extremely sophisticated. To reduce the chance of selection bias, random sampling should be employed whenever possible.

Simple random sampling: Cases are chosen fully at random, ensuring that every case has an equal chance of being chosen. This can be done, for example, by utilising a computerised random number list or by selecting numbers at random from a sealed container or envelope.

Systematic random sampling: After placing the cases in sequence, a random number is then chosen to represent the first case. The remaining cases are then chosen at predetermined intervals, such as every third or fifth patient.

5. Collecting data

- Data can be collected via retrospective and prospective approach. There are advantages and disadvantages to each method and that largely depends on the chosen topic.

- Retrospective data collection is a good option if the material is well documented and comes from a reliable resource. While prospective data would be a better option if the information needed is not typically collected in usual practices. However, this calls for more resources such as time and manpower.

6. Analysing data and evaluating information

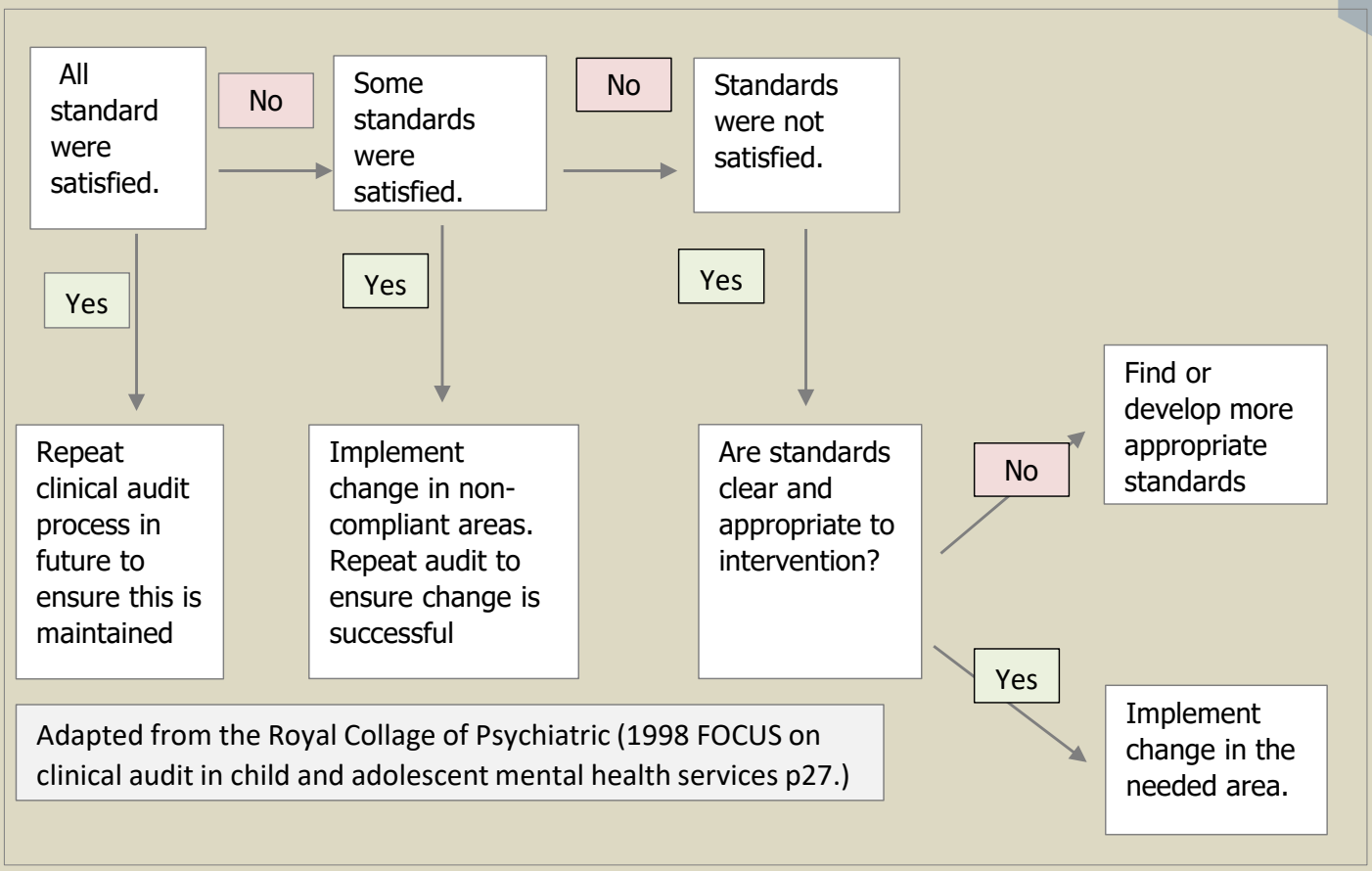
- The analysis can range from simple descriptive statistic to complex statistical method. However, on most occasion a simple and easy to understood method is preferred. Indeed, if the result require implementation the analysis must be simple enough for everyone involved in the care process able to comprehend.

7. Implementing change

- The most difficult process in audit is to implement changes. Implementation of changes after agreeing with recommendation and action is needed to improve quality of care. Without action to improve, the audit will have no tangible results unless the result demonstrates that the standard we targeting is achieved.

8. Close the loop – Re-audit

- Making decisions on when and how to re-audit is the last step in the clinical audit process. To show that revisions or implementation have met the desired criteria, it is crucial to repeat the audit cycle.
- Diagram below shows the appropriate step on when to implement the changes and to re-audit.



References:
1/ Clinical Audit Handbook Kedah State Health Department 2016
2/ Principles for Best Practice in Clinical Audit NHS National Institute for Clinical Excellence 2002
3/ Donabedian A. Criteria and standards for quality assessment and monitoring. Quality Review Bulletin 1986

HPUPM
RECRUS
Res. Newsl.

July 2022
Vol. 2 Issues 17
Page 381

WHAT IS EBM+?

CURRENT EVIDENCE!!!

By Salwana Ahmad

Greenhalgh T, Fisman D, Cane DJ, et al. Adapt or die how the pandemic made the shift from EBM to EBM+ more urgent. BMJ Evidence-Based Medicine. Published Online First: 19 July 2022doi: 10.1136/bmjebm-2022-111952.

EBM analysis

OPEN ACCESS

Adapt or die: how the pandemic made the shift from EBM to EBM+ more urgent

Trisha Greenhalgh ,[1] David Fisman,[2] Danielle J Cane,[3] Matthew Oliver ,[4] Chandini Raina Macintyre[5]

10.1136/bmjebm-2022-111952

[1]Nuffield Department of Primary Care Health Sciences,

Abstract

Evidence-based medicine (EBM's) traditional methods, especially randomised controlled trials (RCTs) and meta-analyses, along with risk-

and—in some—prolonged sequelae. Effective and safe vaccines were produced rapidly, but uptake has been patchy and highly transmissible variants continue to spread and mutate. Coordinated disin-

> "EBM+ is "an approach which systematically considers mechanistic evidence (studies which aim to explain which factors and interactions are responsible for a phenomenon (Parkkinen et al., 2018)) on a par with probabilistic clinical and epidemiological studies" (Tresker, 2022; Aronson et al., 2021).

Methods and tools in traditional EBM were primarily focused on answering simple, focused questions in population-intervention by PICO outcome comparison format, searching for RCTs for study evidence, critically appraising studies for risk of bias using tolls and checklist, and combining them using meta-analysis. While EBM+ investigates extended broad and complex contacts of questions in thorny clinical and policy questions, that are evolving over time, a more flexible and quick-witted approach is needed in the form of modification of EBM's hierarchy of evidence into EBM+. This paper proposes the tools and framework for integrating mechanistic evidence -known as "EBM+" with traditional EBM to form an interdisciplinary evidence-based medicine to better inform clinical and health practices such as for mitigating the COVID-19 pandemic. It integrates a wide range of study design, complexity science, engineering research, and the social sciences with variable quality and definitiveness into a fast decision making. In the paper, Greenhalgh et al. (2018) stated that there is a need for a shift in EBM into EBM+ due to its limitation of evidence hierarchies (validity of study types), which put RCT and meta-analysis on top of study selection and rejecting all other study types as less trustworthy. These limitations of the traditional EBM approaches exposed during the COVID-19 pandemic especially those needed evidence was characterized by a combination of complexity, urgency, and threat in patients' management and decision making. Thousands of lives are likely to have been lost as a result of what was incorrectly claimed as an absence of evidence through the "evidence-based" approach that dismissed or downgraded mechanistic evidence, but exaggerating findings from poorly designed or irrelevant RCTs. The authors introduce some conceptual tools and quality frameworks from various fields involving what is known as mechanistic evidence, where modifications being made to the hierarchy evident by using the Systematic Review/Meta-Analysis as a lens through which primary evidence is interpreted based on grading (Level 1 (Strongest)- Level 5 (Weakest)).

The scenario of using the traditional biomedical versus complex systems paradigms.

The use of the traditional biomedical paradigm versus the complex systems paradigm are different depending on the features of the system where the intervention is set to be tested. It is not referring to the characteristics of the intervention itself (Shiell et al., 2008) (Hawe et al., 2009). In simple trials such as drug and vaccine efficacy, it may only need simple-planned intervention with one unchanged health component, while complex interventions such as study improvement of health and system may need multiple interacting components in trial and adaptive to changes to fit with the environment. An example is given by Greenhalgh & Papoutsi, 2018, an intervention that involved a multi-component public health program that aims to prevent Type-2 Diabetes in the complex system of deprived, multi-ethnic inner-city communities with limited leisure facilities, multiple fast-food and street-food outlets, and a variety of existing faith-based community support programs. It needs inter-related and mutually interacting within components. The scenario can be understood based on the difference between these two paradigms as shown below where the process of the research and decision-making differ in direction of the planned intervention.

Table 1 shows 6 over 9 aspects of paradigm comparison between traditional biomedical versus complex system paradigms approaches to researching health services and systems. (reproduced and adapted from (Greenhalgh & Papoutsi, 2018)

	EBM Traditional Biomedical Paradigm	EBM+ Complex Systems Paradigm
Scientific truth	Singular (Objectively focused questions to answer uncertainty with specific research methods.	Multiple (Integrating multiple research methods from multiple disciplines to answer complex interactions between components in intervention).
Goal of research	Establishing the truth which can be used as a universal and generalized source of information.	Exploring tensions; generating insights; revealing multiple perspectives from multidisciplinary.
Assumed model of causality	Linear, cause, and effect with determining the effect size from the input factors.	Linear, cause, and effect with the determination of the magnitude of the effect based on input factors.
Good research	Is based on strictness, precision, and standardization in research methodology.	Provide strong theory, flexible research methods, and openness to adaptation and modification in shift circumstances.
Data Collection Approach	Need complete dataset to support powered study.	Decisions are made based on incomplete datasets when needed.
Analytic focus	Dualisms: comparing 2 factors of A and B; finding the influence of A and B.	Dualities: inter-relationships and tensions between many factors in shift circumstances.

Reference:

Aronson, J. K., Auker-Howlett, D., Ghiara, V., Kelly, M. P., & Williamson, J. (2021). The use of mechanistic reasoning in assessing coronavirus interventions. *Journal of Evaluation in Clinical Practice*, *27*(3), 684–693. https://doi.org/10.1111/JEP.13438

Greenhalgh, T., & Papoutsi, C. (2018). Studying complexity in health services research: Desperately seeking an overdue paradigm shift. *BMC Medicine*, *16*(1), 1–6. https://doi.org/10.1186/S12916-018-1089-4/TABLES/1

Parkkinen, V.-P., Wallmann, Dr. C., Wilde, M., Clarke, Dr. B., Illari, Dr. P., Kelly, M. P., Norell, C., Russo, F., Shaw, B., & Williamson, Dr. J. (2018). *Evaluating Evidence of Mechanisms in Medicine*. https://doi.org/10.1007/978-3-319-94610-8

Shiell, A., Hawe, P., & Gold, L. (2008). Complex interventions or complex systems? Implications for health economic evaluation. *BMJ*, *336*(7656), 1281–1283. https://doi.org/10.1136/BMJ.39569.510521.AD

Tresker, S. (2022). Treatment Effectiveness and the Russo–Williamson Thesis, EBM+, and Bradford Hill's Viewpoints. *Https://Doi.Org/10.1080/02698595.2022.2054396*, 1–28. https://doi.org/10.1080/02698595.2022.2054396

ANNOUNCEMENTS

1. MJH Series 12: Effect of Physical Therapy vs Arthroscopic Partial Meniscectomy in People With Degenerative Meniscal Tears Five-Year Follow-up of the ESCAPE Randomized Clinical Trial. 23rd Sept 2022 by Ms. Salwana
2. Artificial Intelligence in Healthcare. A Tea Session with AI Experts. 4 August 2022 3:00-4:30 PM.
3. Wanted and ready to do a Cochrane Systematic Review? 12th August 2022 by Prof. Dr Jackie Ho & Dr Prashanti Eachempati
4. Research Colloquium series 4:
   i. "A Developmental Model of Patient Engagement across Multiracial Society in Malaysia" by Assoc. Prof. Dr. Aneesa Binti Abdul Rashid
   ii. "Exploring the Critical Components in Doctor-Patient Communication, Qualitative study" by Ms. Nurul Ain binti Mohd Salim
5. Research Development Workshop, 25-26 August 2022.
6. 3rd Clinical Epidemiology Workshop: Diagnostic and Prognostic Research
7. The 6th International Clinical Trials Methodology Conference 2022. https://ictmc.org/
8. 9th International Congress on Peer Review and Scientific Publication. September 8 – 10, 2022 Chicago, IL. https://peerreviewcongress.org.
9. The 9th Asia Pacific Primary Care Research Conference, 1 – 3 December 2022
10. NeuroCoB Book Promo

UPM UNIVERSITI PUTRA MALAYSIA BERILMU BERBAKTI

JUBLI EMAS UPM 1971-2021

HPUPM HOSPITAL PENGAJAR UPM PROVIDING EXTRAORDINARY CARE TOGETHER

CLINICAL RESEARCH UNIT PRESENTS

META-JOURNAL HOUR

Is exercise-based physical therapy noninferior to arthroscopic partial meniscectomy during a 5-year follow-up period in patients aged 45 to 70 years with a degenerative meniscal tear?

ARTICLE TITLE

Effect of Physical Therapy vs Arthroscopic Partial Meniscectomy in People With Degenerative Meniscal Tears

Five-Year Follow-up of the ESCAPE Randomized Clinical Trial

Click to access full article:

10.1001/jamanetworkopen.2022.20394

23rd SEPTEMBER 2022 (FRIDAY) | 10.30 – 11.45AM | WEBEX

Click [HERE] to register
or scan the QR code below:

Brought to you via:

webex by CISCO

Speaker

Ms. Salwana Ahmad
Research Officer, CRU

Open to all UPM/ HPUPM staff, students and public
CPD points and e-certificate will be awarded upon successful participation

3 GOOD HEALTH AND WELL-BEING

For any inquiries, please contact: 03-97699759 or email: cru_hpupm@upm.edu.my

https://www.facebook.com/hpupm https://mobile.twitter.com/hpupm https://www.instagram.com/hpupm

PERTANIAN • INOVASI • KEHIDUPAN

BERILMU BERBAKTI WITH KNOWLEDGE WE SERVE

www.hpupm.upm.edu.my

UPM

HPUPM
HOSPITAL PENGAJAR UPM

ARTIFICIAL INTELLIGENCE IN HEALTHCARE

A Tea Session and Discussion with AI Experts

4 AUGUST 2022 (THURS)
3:00–4:30 PM

Dewan Banquet, Aras 1, HPUPM

Register Now : shorturl.at/vALMN

We cordially invite everyone who are interested with AI in healthcare to join our tea session and to have a chat with AI experts from the Faculty of Computer Science and Information Technology (FCSIT), UPM

A Joint Effort Between HPUPM and FCSIT, UPM

UPM UNIVERSITI PUTRA MALAYSIA BERILMU BERBAKTI

HPUPM HOSPITAL PENGAJAR UPM PROVIDING EXTRAORDINARY CARE TOGETHER

First Announcement

Cisco webex

LIVE WEBINAR

August 12th, 2022

9.00 am – 1.00 pm

Clinical Research Unit, HPUPM presents

Webinar on COCHRANE REVIEW Preparation

Cochrane reviews are systematic reviews carried out by an international network of researchers across 130 countries. The main aim of the Cochrane reviews is to help healthcare providers, policy makers, patients, their advocates, and carers make well-informed decisions about healthcare. Cochrane reviews have also been recognized internationally as the highest standard in evidence-based healthcare.

Whether you are a clinician, researcher, academician, or postgraduate student,

we cordially invite you to join this webinar !

Speaker 1

PROF. JACQUELINE JUDITH HO

Co-Director of Cochrane Malaysia

RCSI & UCD Malaysia Campus

Speaker 2

PROF. DR. PRASHANTI EACHEMPATI

Dental Faculty,

Manipal University College Malaysia

HPUPM Staff: FREE

UPM Staff/Student: RM50

Others: RM100

http://shorturl.at/SYZ07

For any inquiries, please contact:

Dr. Yew Sheng Qian | 03-9769 9761 | shengqian@upm.edu.my

Ms. Faridzatul Syuhada Abdul Rashid | 03-9769 9763 | faridzatul@upm.edu.my

3 GOOD HEALTH AND WELL-BEING

https://www.facebook.com/hpupm https://mobile.twitter.com/hpupm https://www.instagram.com/hpupm

PERTANIAN • INOVASI • KEHIDUPAN

BERILMU BERBAKTI WITH KNOWLEDGE WE SERVE

www.hpupm.upm.edu.my

HPUPM
HOSPITAL PENGAJAR UPM
PROVIDING EXTRAORDINARY CARE TOGETHER

Organised by: Clinical Research Unit, HPUPM

Tentative Program

Time	Topic	Speaker
0850-0900	Introductory speech	CBH
0900-0930	• A brief introduction of Cochrane review • What are systematic reviews and how do they differ from narrative reviews? • What are the steps in a Cochrane review? • Why Cochrane reviews?	JJH
0930-1000	• How to become a Cochrane review author • Guide to complete a Cochrane review proposal	PE & JJH
1000-1030	Break	
1030-1130	• The process of developing Cochrane review titles and assessing their suitability • Discussion of potential Cochrane review title (to be submitted prior to workshop)	JJH
1130-1200	• Theoretical issues or challenges in conducting a Cochrane review	PE
1200-1230	• Training offered by Cochrane Malaysia	PE
1230-1300	Q&A Session	PE & JJH

JJH : Prof. Jacqueline Judith Ho
PE : Prof. Dr. Prashanti Eachempati
CBH: Assoc. Prof. Dr. Chew Boon How

Note: The Organiser reserves the right to cancel or change the topic or trainer of the program, if for whatever reasons beyond its control.

3 GOOD HEALTH AND WELL-BEING

UPM UNIVERSITI PUTRA MALAYSIA BERILMU BERBAKTI

HPUPM HOSPITAL PENGAJAR UPM PROVIDING EXTRAORDINARY CARE TOGETHER

ORGANISED BY:
CLINICAL RESEARCH UNIT (CRU), HPUPM

REGISTER NOW
Scan the QR code or click on this link:

Join us !

Cisco webex

LIVE WEBINAR

RESEARCH *Colloquium* Series 4

24th AUGUST 2022 (WEDNESDAY)

2:15 PM – 3.45 PM

Presenter

2.15 PM – 3.00 PM

"A Developmental Model of Patient Engagement across Multiracial Society in Malaysia"

ASSOC. PROF. DR. ANEESA BINTI ABDUL RASHID
Associate Professor / Specialist
Department of Family Medicine

3.00 PM – 3.45 PM

"Exploring the Critical Components in Doctor-Patient Communication, Qualitative study"

MS. NURUL AIN BINTI MOHD SALIM
PhD in Medical Sciences Specializing in Medical Education By Research

UPON SUCCESSFUL PARTICIPATION, YOU WILL GET

CPD Points & e-Certificate

3 GOOD HEALTH AND WELL-BEING

For any inquiries, please contact:
Ms. Faridzatul Syuhada Abdul Rashid +03 9769 9763 | Email: cru_hpupm@upm.edu.my

https://www.facebook.com/hpupm https://mobile.twitter.com/hpupm https://www.instagram.com/hpupm

PERTANIAN • INOVASI • KEHIDUPAN

BERILMU BERBAKTI WITH KNOWLEDGE WE SERVE

www.hpupm.upm.edu.my

UPM UNIVERSITI PUTRA MALAYSIA BERILMU BERBAKTI

JUBLI EMAS UPM 1971-2021

HPUPM HOSPITAL PENGAJAR UPM PROVIDING EXTRAORDINARY CARE TOGETHER

LAST ANNOUNCEMENT

CLINICAL RESEARCH UNIT (CRU), HPUPM PRESENTS

RESEARCH DEVELOPMENT WORKSHOP

A hybrid workshop to learn and conduct a proper and high-quality clinical, biomedical and health sciences research.

25 – 26 AUGUST 2022 | 8.00 AM – 4.30 PM

BOOK YOUR PREFERRED SLOT

1. GO-NOW Hands-on Physical Sessions Participants*

OR

2. Attendees* (Physical / Online)

LIMITED TO 10 SEATS ONLY!

Categories of participants	
GO-NOW Participants	To attend with output*
Attendees	Without output

*Output:
Research proposal/ mini review/ peer-review

GO-NOW Participants are required to submit 500 words essay to introduce and argue on a topic of own professional interest or areas to pursue; at least one month before workshop to CRU.

Venue: Hospital Pengajar UPM, Serdang

LIVE

webex by CISCO

Category	Fees
HPUPM/ FPSK staff/ students	RM 200
Other UPM faculties	RM 300
Non-UPM (Malaysians)	RM 500
Non-Malaysians	USD 500

For pre-registration, scan QR code below
Or click [HERE]

Register Now PAY LATER

***An email will be sent for registration and payment confirmation near to the workshop date.

For further information, please email: cru_hpupm@upm.edu.my or contact: 03-9769 9763/ 9759/ 9761

https://www.facebook.com/hpupm https://mobile.twitter.com/hpupm https://www.instagram.com/hpupm

PERTANIAN • INOVASI • KEHIDUPAN

BERILMU BERBAKTI WITH KNOWLEDGE WE SERVE

www.hpupm.upm.edu.my

UPM UNIVERSITI PUTRA MALAYSIA BERILMU BERBAKTI

JUBLI EMAS UPM 1971-2021

HPUPM HOSPITAL PENGAJAR UPM PROVIDING EXTRAORDINARY CARE TOGETHER

LAST ANNOUNCEMENT

TENTATIVE OF THE WORKSHOP

Hour	Talk/ Topic	Tentative speaker
	DAY 1 (25 AUGUST 2022)	
0800 - 0815	***REGISTRATION***	
0815 - 0830	Introduction : Quality healthcare, research, KPI & career advancement	CBH & TDPA
0830 - 0845	**Testimony I :** Personal sharing by an outstanding researcher	Prof. Sherina
0845 - 0915	***Interactive talk 1***: Understanding the whole research process	CBH
0915 - 1015	***Interactive talk 2:*** Fundamental concepts of clinical epidemiology	CBH
1015 - 1030	***Interactive talk 3:*** Classification of epidemiologic research	CBH
	BREAK	
1045 - 1115	***Interactive talk 4:*** An introduction to qualitative study & designs	Dr. Irmi
1115 - 1145	***Interactive talk 5:*** Research question, literature review & conceptual framework	CBH
1145 - 1215	***Interactive talk 6:*** An introduction to databases & search strategies	CBH & an invited speaker
1215 - 1245	***Interactive talk 7:*** Theoretical design	CBH
1245 - 1315	***Interactive talk 8:*** Data collection design	CBH
	LUNCH	
1400 - 1430	***Interactive talk 9:*** Sample size estimation	CBH
1430 - 1500	***Interactive talk 10:*** Statistical design	CBH
1500 - 1515	***Interactive talk 11:*** Summary: clinical epidemiology & research methodology	CBH
1515 - 1545	***Interactive talk 12:*** Writing up a study proposal	CBH
1545 - 1615	***Interactive talk 13:*** Ethics clearance for a clinical study	Prof Johnson
1615 - 1645	***Interactive talk 14:*** Funding opportunities	Ms. Nurfaizah
	DAY 2 (26 AUGUST 2022)	
0800 - 0815	***REGISTRATION***	
0815 - 0915	***Interactive talk 15:*** Statistical analysis	CBH
0915 - 1000	***Interactive talk 16:*** Comprehensive reporting, quality writing	Ms. Iman
1000 - 1030	***Interactive talk 17:*** Publication process	Ms. Salwana
	BREAK	
1045 - 1245	***Interactive talk 18:*** Intellectual Property. UPM IP Putra Science Park and the Sistem PRiMS (Putra Research & Innovation Management System)	Dr. Zahira
	LUNCH	
1400 - 1500	***Interactive talk 19:*** What is evidence-based practice? Appraise the evidence: primary research and systematic reviews & meta-analysis	CBH
1500 - 1530	***Interactive talk 20:*** Summary: a suggested roadmap for clinicians to higher quality in research and publication	CBH
1530 - 1545	**Testimony II :** Personal sharing by an outstanding researcher	Prof Amin
1545 - 1630	**Closure :** Summary & What have you learned? **Q&A**	CBH
	Break & dismissed	
	DAY 3 (AFTER 2-3 MONTHS POST-WORKSHOP) ****For GO-NOW Participants only***	**Facilitator**
0800 - 0830	***REGISTRATION & Intro***	
0830 - 1630	Study proposal presentation	CBH

*CBH: Associate Prof. Dr. Chew Boon How

ORGANIZED BY
CLINICAL RESEARCH UNIT, HPUPM

LAST ANNOUNCEMENT

SHORT BIOGRAPHIES OF THE SPEAKERS

ASSOCIATE PROFESSOR DR. CHEW BOON HOW

MD (USM), MMed Family Medicine (UM), PhD (Utrecht)

The main speaker is Associate Prof. Dr. Chew Boon How who was the top 2% scientist in clinical medicine disciplines in year 2019 and 2020, best clinical researcher in UPM in 2021, was trained in the world-renowned centre of clinical epidemiology Utrecht University Medical Center who graduated with a PhD degree while published > 20 articles during that period of 4 years from both his PhD and collaborative research.

He is an Associate Professor of Family Medicine, a Consultant Family Medicine Specialist at Family Medicine Specialist Clinic Universiti Putra Malaysia Teaching Hospital (HPUPM), and also the Head of the Clinical Research Unit in HPUPM. He was a research mentor in the Advanced Training in Family Medicine (ATFM) the Graduate Certificate in Family Medicine (GCFM), the postgraduate qualification of the MAFP/icFRACGP (International Conjoint FRACGP) by the Academy of Family Physicians of Malaysia.

He is a Visiting Senior Lecturer to King's College London for the Malaysian GestatiOnal Diabetes and prevention of DiabtES Study (MYGODDESS) (2020- 2022). He is a Member of the International Committee for Talent Development with the Danish Diabetes Academy (2018-2021). He is a board member in the Ethics Committee for Research Involving Human Subjects Universiti Putra Malaysia (JKEUPM). He was involved in the Scientific Review Board of the Institute for Health Systems Research, and the Committee for Research Assessment (JPP-NIH), National Institute of Health Malaysia, Ministry of Health Malaysia. He was an associate editor and guest editor for Malaysian Family Physicians, World Journal of Diabetes, Frontiers in Endocrinology and Asia Pacific Journal of Public Health.

His research is mainly on diabetes mellitus focusing type 2 diabetes and gestational diabetes mellitus beside other chronic diseases and healthcare issues related to health behaviours and psychosocial wellbeing. He is skilled in clinical epidemiology.

He had been supervising > 5 PhD, > 5 MSc and > 5 MMed students. He has been involved in more than 30 clinical research, >20 of which is as the principal investigator, and >10 are clinical trials. Had published > 70 journal articles, > 4 books, and 5 chapters, > 5 teaching materials, 2 training manuals, 2 national reports (diabetes and asthma) and a few monographs.

ORCID ID: 0000-0002-8627-6248
Scopus ID: 39161012600
Google ID: Boon-How Chew 周文豪

Faculty of Medicine and Health Sciences,
Universiti Putra Malaysia,
43400 UPM Serdang,
Selangor, Malaysia
Email: chewboonhow@upm.edu.my

SHORT BIOGRAPHIES OF THE SPEAKERS

PROFESSOR DATIN DR SHERINA MOHD SIDIK

MBBS (Malaya), Family Medicine (UKM), Community Health (Auckland)

Sherina Mohd Sidik is a Professor & Consultant in Family Medicine at the Faculty of Medicine & Health Sciences, Universiti Putra Malaysia. She was Deputy Director of the Cancer Resource and Education Centre, Universiti Putra Malaysia from 2016-2020. Professor Sherina's research interests focuses mainly on mental health and behavioural intervention in the community and primary care settings. She has been lead / principal investigator for many research in these areas and has more than 150 publications in international and local journals and books. Prof Sherina has received several awards for her publications, namely the national award "Anugerah Akademik Negara" for "Anugerah Penerbitan Makalah Jurnal" in 2019, the "Anugerah Hadiah Fellowship Naib Canselor" from Universiti Putra Malaysia for "Anugerah Penerbitan Makalah Jurnal" in 2018, "Insentif Makalah Jurnal" in 2016 and "Anugerah Penyelidik Berprestasi Tinggi Fakulti Perubatan dan Sains Kesihatan" in 2019. She is among the eight Faculty of Medicine and Health Sciences, UPM academicians who were listed under the 'World's Top 2% Scientists (Single Year Achievement)" in 2020.

Professor Sherina collaborates closely with the Malaysian Ministry of Health, as well as with several other national and international organisations; namely the World Organisation of Family Doctors (WONCA Working Party on Research) and Oxford International Primary Care Research Leadership Programme, United Kingdom. She is currently appointed as an international advisor in the Advisory Committee for the Primary Health Care Research Consortium, which has members from USA, Africa, Australia, New Zealand, Lebanon, Bangladesh and India. Professor Sherina served as an Editorial Board Member in two well recognised and established Malaysian journals; the Medical Journal of Malaysia (2016-2020), and the Malaysian Journal of Medicine & Health Sciences (2011-2018). She was guest editor for the Malaysian Armed Forces Journal (2017-2018). She also served in the International Advisory Board for the Journal of Primary Health Care, New Zealand (2013-2014). She has supervised more than 20 PhD and 18 MSc students as supervisor and co-supervisor, including more than 50 medical students in their research projects.

Orcid ID: https://orcid.org/0000-0001-6754-6145 Scopus
Author ID: 8285851400
Researchgate Profile: https://www .researchgate.net/profile/Sherina-Mohd-Sidik
Scholar Google profile: https://scholar.google.com/citations?hl=en&user= IBYXXtgAAAAJ

Department of Psychiatry,
Faculty of Medicine and Health Sciences, Universiti Putra Malaysia,
43400 UPM Serdang, Selangor,
Malaysia
Email: sherina@upm.edu.my

SHORT BIOGRAPHIES OF THE SPEAKERS

PROF. DR. JOHNSON STANSLAS

Johnson Stanslas obtained his Ph.D. degree in the field of Cancer Pharmacology from the School of Pharmacy at The University of Nottingham (UK) in 1998. He carried out his doctoral research under the supervision of Prof. Dr. Malcolm Stevens, the discoverer of the brain tumour drug temozolomide (TEMODAR®). Upon returning from the U.K, he joined Universiti Putra Malaysia (UPM) as a lecturer in December 1998. He was promoted to senior lecturer in 2004 and subsequently, Associate Professor in 2006. In April 2013, he was appointed to the rank of full professor. He has been the Head of the Pharmacotherapeutics Unit at the Department of Medicine, Faculty of Medicine and Health Sciences, UPM, since 2009, and is the leader of the informal research group 'Cancer Research and Drug Discovery (CRDD)' which was established on the 13th December 2002. He is currently heading the Precision Medicine Research Group at the Faculty of Medicine and Health Sciences, UPM. He is actively involved in the discovery and preclinical development of new anticancer and anti-inflammatory agents (for allergic asthma and neuroinflammation). To date, he has been successful in discovering lead anticancer molecules for the treatment of breast, prostate, colon, and pancreatic cancers. His research also extends to efficacy and toxicity studies of cytotoxic and molecular targeted agents in cancer patients with the intention of translating laboratory findings to the clinic, for improvement in cancer management. He recently concluded a study looking at the pharmacogenomics and pharmacometabolomics of SSRIs in major depressive disorder patients. To date, he has received several research grants amounting to almost RM 6 million from local funding bodies, such as the Ministry of Higher Education (MOHE), Ministry of Science, Innovation, and Technology (MOSTI), Ministry of Agriculture (MOA) as well as UPM, for projects related to drug discovery and translational medicine. Through international collaborations involving Singapore and the USA, he has secured joint grants which are based in the hosting countries. He has also collaborated with several research institutes and industries, such as the School of Pharmacy, University of Nottingham (United Kingdom); Institute of Cancer Research (University of Bradford, United Kingdom); Universiti Malaya Medical Centre, Universiti Kebangsaan Malaysia Medical Centre, the University of Texas Health Science Center at Houston, UTHealth (USA), Department of Pharmacology (Yale University, USA) and Autoimmune Sdn. Bhd. (Malaysia). Thus far, 26 Ph.D. and 27 MSc students have successfully graduated under his supervision. He has more than 130 publications within his area of specialty and has been published in reputable international peer-reviewed journals. As of 2022, his publications have been cited 2359 times with an H-index of 24, as tracked by SCOPUS, and more than 3620 times with H- and i10-indices being 31 and 72, respectively, as tracked by Google Scholar. He has been invited to present his research at plenaries as well as been an invited speaker at local and international conferences. He frequently evaluates local and international grant proposals. He serves as a consulting editor of Pharmacological Research and an editorial board member of Cancer Management and Research, Oncologie and Current Pharmacogenomics and Personalized Medicine. He has been a reviewer for many international journals in the fields of pharmacology and therapeutics. He founded and is the current President of the Malaysian Association of Cancer Research (MACR) as well as a committee member of the Malaysian Society for Music in Medicine (MSMM). He is a member of the American Society for Pharmacology and Experimental Therapeutics (ASPET), American Association for Cancer Research (AACR), Malaysian Oncological Society (MOS), and Malaysian Society for Neuroscience (MSN). He has been a member of the Universiti Putra Malaysia medical research ethics committee since 2008 and presently serves as the Chair of the Post Approval Sub-committee (PASC).

SHORT BIOGRAPHIES OF THE SPEAKERS

PROF. DR. AMIN BIN ISMAIL

Dr. Amin bin Ismail is a Professor at the Department of Nutrition, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia (UPM). Currently he is a Director of Center for Quality Assurance of UPM. Dr. Amin's research areas focus on chemistry and biochemistry of foods, food composition analysis, cocoa polyphenols, and exploring of underutilised plants for human nutrition and their health-promoting components. Dr. Amin has graduated more than 20 PhD and 25 Master Science students. To date, Dr. Amin has more than 250 publications, and *h-index* is 49 (based on SCOPUS). Currently, he is an Associate Editor for "Food Chemistry" and Editorial Board Member for "Journal of Functional Foods" and few international journals. He is an Editor-in-Chief for Pertanika Journal of Tropical Agricultural Science of UPM. Since 2012, he has been appointed as a Visiting Researcher at the Guangxi Academy of Agricultural Sciences, Nanning, China. In 2018, he was received the Malaysia's Research Star Award for high impact paper in "Agricultural Sciences" category awarded by Elsevier and Ministry of Education Malaysia.

DR IRMI ZARINA ISMAIL

MD (USM), MMed Family Medicine (UM)

A Consultant Family Medicine Specialist at Family Medicine Specialist Clinic Universiti Putra Malaysia Teaching Hospital (HPUPM), and the Head of the Department of Family Medicine, Faculty of Medicine and Health Sciences, UPM. She has deep interest in teaching. She is a research mentor in the Advanced Training in Family Medicine (ATFM) the Graduate Certificate in Family Medicine (GCFM), teaches Clinical Audit at the Diploma in Family Medicine and frequently involved in talks on qualitative study

She is a current associate editor for Malaysian Family Physicians and has assisted in reviewing many papers from PLOS One and MFPJ. She is also the current secretary for Qualitative Research Association Malaysia.

Her research is mainly on diabetes mellitus focusing type 2 diabetes and preconception care besides having involved in creating reproducible learning objects for medical students and patients. Her PhD study mainly involved qualitative study especially in the case study design. She had been supervising > 5 MMed students and co supervise >5 PhD and Master of Science Students.

ORCID ID: 0000-0002-7770-7966

Faculty of Medicine and Health Sciences,
Universiti Putra Malaysia,
43400 UPM Serdang,
Selangor, Malaysia
Email: chewboonhow@upm.edu.my

SHORT BIOGRAPHIES OF THE SPEAKERS

DR. ZAHIRA MOHD ISHAN

DR. Zahira MOHD. ISHAN is a Deputy Director of Putra Science Park (PSP), Universiti Putra Malaysia (UPM) and an Associate Professor at the School of Business and Economics, UPM. She obtained a degree of Laws (Hons.) from the International Islamic University Malaysia in 1994, a Master of Laws in Commercial and Corporate Law from the University of London in 1996, and a PhD in Business Law from UPM in 2008. She also attended certified courses relevant to technology transfer managers, namely the series of Technology Transfer Workshop under the Alliance of Technology Transfer Professionals (ATTP); the JPO/IPR Training Course for IP Trainers 2018; the Licensing Academy by PIPRA and UC Davis School of Law 2014; SRI's Five DOI 2014; SRI's Venture Plan Essentials Boot Camp 2013, and Professional South East Asian Patent Drafting Course (SEAD) 2013, apart from several other seminars and courses on technology transfer and commercialization. She was also a Professional Trainer (MIM-CPT) (Malaysian Institute of Management) in 2010-2012.

Dr Zahira joined UPM in 1994 and PSP in 2013. She has the experience teaching Business Law, Company Law, International Trade Law, Franchising Law and Intellectual Property (IP) Law courses and her research interest is in legal business relation and IP. As a Deputy Director, she is responsible for managing UPM's intellectual property protection and experienced in negotiations for IP matters in research collaboration, joint ownership, licensing and assignment deals. She speaks on the issues of intellectual property rights and intellectual property management in seminars and workshops at the national and international levels. She had also actively participated in a series of the World Intellectual Property Organization (WIPO) regional meetings for the establishment of the Technology and Innovation Support Centre (TISC) in Malaysia and in UPM as well as the Enabling the IP Environment (EIE) Project. Her contribution to IP management in UPM includes bringing up the university's name by winning the National IP Award for the Best Organization in IP Management in 2014, 2016, 2017 and 2018. DrZahira is also actively involved in a non-profit association for the technology managers of Malaysia, namely the Innovation and Technology Managers Association (ITMA) Malaysia since 2015, where she held the post of Secretary of ITMA Malaysia for the 2016/2017 and 2017/2018 sessions, Assistant Secretary for the 2018/2019 session, and currently appointed as Committee Member for 2020/2022 session. She was also appointed as a member of Franchise Advisory Board (2007-2009) and became a member of the Malaysian Franchise Association .

SHORT BIOGRAPHIES OF THE SPEAKERS

NURFAIZAH SAIBUL
BSc. Nutrition and Community Health (UPM), MSc. Community Nutrition (UPM)

Nurfaizah Saibul is a research officer at the Clinical Research Unit (CRU), Hospital Pengajar Universiti Putra Malaysia (HPUPM). She formerly worked as a social research officer at Institute for Social Science Studies (IPSAS), Universiti Putra Malaysia from 2011 to 2013. She worked as a research officer at the Cancer Resource and Education Center (CaRE), Universiti Putra Malaysia from 2014 to 2021. She had many years of experience in conducting social science research, health promotion activities, and community intervention programs. She had experience in industry and community relations activities, particularly in cancer education, awareness, and support. She had several publications in journal articles (2 as author and 2 as co-author) and research book chapters (2 books) and was actively involved in popular writing. She is being trained to be a speaker and facilitator in research development programs and activities in CRU to help researchers in HPUPM on research, particularly on clinical trials. Currently, she was certified in good clinical practice (GCP) and is looking forward to conducting clinical trials for future endeavors.

Orcid ID: https://orcid.org/0000-0002-9734-7355

SALWANA BINTI AHMAD
BSc. (Hons) Science (Biology Genetic) (UKM), MSc. Science (Environmental) (UOW)
Ph.D. Candidate (Biotherapeutic), UPM

Salwana Ahmad is a Research Officer at Clinical Research Unit (CRU), Teaching Hospital, Universiti Putra Malaysia. She was previously appointed as a research officer in the Cancer Resources and Education Centre with 5 years of experience in the Community Research and Cancer Education Program. She also leads administration tasks for Internal UPM Audit, 5S, and EKSA. Currently, she held a position in CRU as a research officer for Clinical and Health Sciences related research mainly for providing support services for clinicians and research members in HPUPM. She led Randomization Services and lead two ongoing Research protocols for Research Integrity and Evidence-Based Medicine while supporting other services in CRU. She contributes as Papers Editor in the RECRUS Research Newsletter. She believes that written and analytical skills are part of academic excellence in critical thinking, thus proceeding with her Ph.D. in Clinical Trial Polit study as part of knowledge enhancement for her future career.

NURUL IMAN HAFIZAH BINTI ADANAN
BSc. Nutrition and Dietetics (Hons) (UiTM), MSc. Clinical Nutrition (UPM)

Iman is a research officer at Clinical Research Unit (CRU), HPUPM. She is a dietitian by qualification and has obtained her postgraduate degree in MSc. Clinical Nutrition from UPM in 2017. Previously, she was a lecturer at MAHSA University and was the key person for Academic Writing module for undergraduate students. During her postgraduate research, she has published several papers in JCI-indexed journals. In 2018, she was awarded Education Grant by Malaysian Dietitian Association (MDA) to present her research works at the International Conference of Renal Nutrition and Metabolism (ICRNM). Her passion in research and writing has awarded her best research presenters and most recently, Best Thesis Award (2nd prize) from MDA in 2021. Currently, she is a Paper Editor for CRU RECRUS Newsletter. She has delivered a webinar on "Key Points in Academic Writing" in 2021 targeting postgraduate students and early career researchers. This year, she hopes to extend her experiences and knowledge to help researchers to write better.

LinkedIn: https://my.linkedin.com/in/nurul-iman-hafizah-adanan-835190194

3rd Clinical Epidemiology Workshop

DIAGNOSTIC & PROGNOSTIC RESEARCH

Institute for Clinical Research (ICR) would like to invite you to participate in our 3rd clinical epidemiology workshop 2022. This is a joint collaboration with **Julius Center University Medical Center Utrecht, the Netherlands** and **ICR**.

DATE: 18TH-20TH OCTOBER 2022

TIME: 8AM- 5PM

VENUE: NATIONAL INSTITUTES OF HEALTH, SETIA ALAM

Michiel L. Bots

MD, PHD, PROFESSOR OF EPIDEMIOLOGY IN CARDIOVASCULAR DISEASE

Ilonca Vaartjes

PHD, ASSOCIATE PROFESSOR OF EPIDEMIOLOGY

Yvonne Koop

PHD, ASSISTANT PROFESSOR OF EPIDEMIOLOGY

Who should attend?

Researchers, scientists and health care professionals who are interested to learn **how to design studies from clinical perspective.**

If you are interested, please fill up the google form via this link:
https://forms.gle/uDH8Fd6duE6KmPrC6 before **5th August 2022**.

Places are available for up to **30 participants** on first come first serve basis.

SCAN ME TO FILL UP THE FORM

For more information, please contact
Amy Hwong at 03-33628826 or amyhwong@crc.gov.my
Yvonne Lim at 03-33628828 or limmf@crc.gov.my

Looking forward to meet all of you soon!

3rd Clinical Epidemiology Workshop

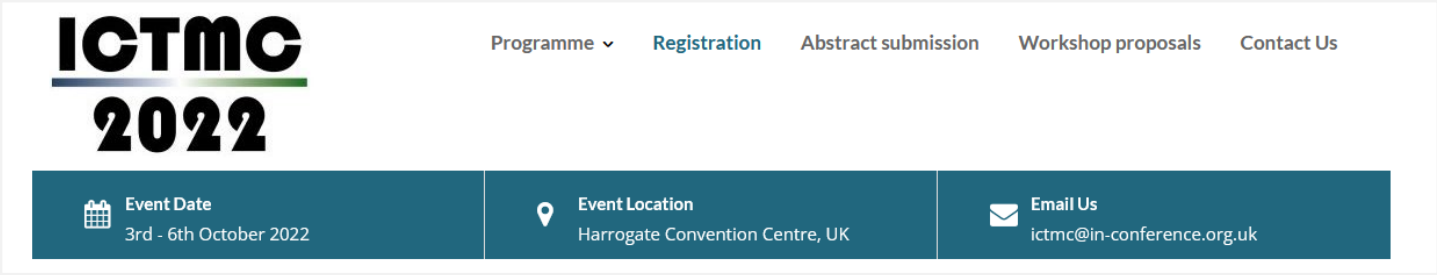
DIAGNOSTIC & PROGNOSTIC RESEARCH TENTATIVE PROGRAMME

	Diagnostic Research
Tuesday	
Time	**Topics**
8.30 - 9.30	Registration & Ice breaking
9.30 - 11.00	Basics of Diagnostic Research Discrimination & Calibration
11.00 - 11.30	*Break*
11.30 - 12.30	Diagnostic research: added value of new diagnostic test
12.30 - 14.00	Lunch break
14.00 - 15.00	Example: Use of a diagnostic score to prioritize CT imaging for patients suspected of ischemic stroke
15.00 - 15.30	*Lunch break*
15.30 - 16.30	Exercises & Discussion
	Prognostic Research
Wednesday	
Time	**Topics**
8.30 - 9.00	Registration
9.00 - 10.00	Basics of prognostic research
10.00 - 10.30	*Break*
10.30 - 11.30	Principles of prognostic research
11.30 - 12.30	Example: Cardio-oncology: the relevance and challenges from an epidemiological and clinical perspective
12.30 - 14.00	*Lunch break*
14.00 - 15.00	Exercises & Discussion
15.00 - 15.30	*Break*
15.30 - 16.30	Group work: Working on proposals
	Clinical Trials & Project Proposals
Thursday	
Time	**Topics**
8.30 - 9.00	Registration
9.00 - 10.00	Group work: Working on proposals
10.00 - 10.30	*Break*
10.30 - 11.30	Proposal 1: Presentation + Discussion
11.30 - 12.30	Proposal 2: Presentation + Discussion
12.30 - 14.00	*Lunch break*
14.00 - 15.00	Principles of pragmatic trials
15.00 - 15.30	*Break*
15.30 - 16.30	Registry-based trials

REGISTER NOW

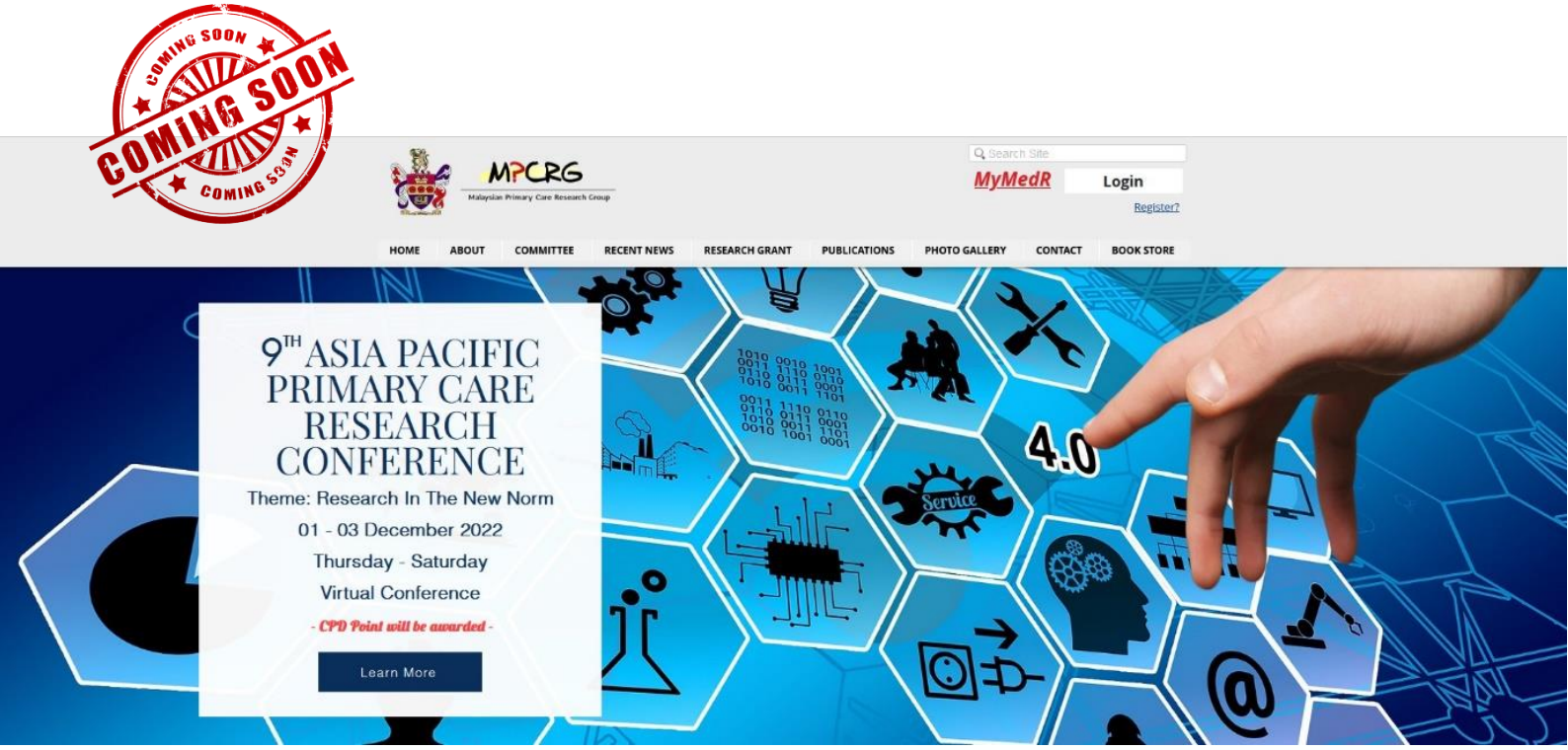
Upcoming International Conference & Congress

1. The 6th International Clinical Trials Methodology Conference 2022. https://ictmc.org/



2. UPDATE: ABSTRACT SUBMISSION CLOSED. 9th International Congress on Peer Review and Scientific Publication (Abstract Submission Extended)
https://peerreviewcongress.org/

- Editorial on September 20, 2021. John P. A. Ioannidis et al. Ninth International Congress on Peer Review and Scientific Publication Call for Abstracts. JAMA. 2021;326(13):1265-1267.
doi: 10.1001/jama.2021.16596.
- Editorials published 20 September 2021. John P. A. Ioannidis et al. Ninth international congress on peer review and scientific publication—call for abstracts. BMJ 2021;374:n2252.
doi: 10.1136/bmj.n2252.



Chairperson Welcome Note

Dear friends and colleagues,

On behalf of the organising committee, it is my great pleasure to invite you to the 9th Asia Pacific Primary Care Research Conference hosted by the Malaysian Primary Care Research Group, an ancillary group of the Academy of Family Physicians Malaysia.

The theme of the conference this year is **"Research in the New Norm"**, aptly chosen in line with the advancement in information technologies since the COVID-19 pandemic. Our aim is to guide researchers in conducting research following new norms and in using digital technologies.

The conference will be held virtually on the 2nd to 3rd of December, 2022 (Friday and Saturday) and will be preceded by the Research Championship Workshop on the 1st of December 2022 (Thursday).

The research championship workshop is specifically designed for budding researchers to build and enhance their research projects. They will be guided by experienced researchers from the Asia Pacific region. Selected groups will have the opportunity to present their proposed projects with chances of winning exciting prizes.

We look forward to welcoming participants across the globe, particularly from the Asia Pacific region, to share their research projects, especially those conducted during the last two challenging years. See you virtually in December!

Associate Professor Dr Noor Azimah Muhammad
Organising Chair

For more information on the conference, click [HERE]

Contents

This book talks on how Instagram addiction can be shown on brain imaging using functional MRI. Instagram is very useful in our everyday life activities and has become one of the top social media applications used by millions worldwide. It provides a platform for sharing, networking and entertainment. Nevertheless, there is a dark side to it. Addiction occurs when someone is overly preoccupied with their object of interest until it causes impairment of functions of daily living and deterioration from previous levels of performance. Most people know about the physical effects of addiction, namely headache, neck stiffness, sleeplessness, drowsiness, lack of attention and focus on studies or work, among others. Little is known that addiction can lead to changes in the brain. The neurobiology of addiction is explained in this book and takes the reader on a journey into the brain to explore how real this addiction is. This book provides insights into why the addicted person finds it difficult to avoid the object of addiction and continues to seek it despite the ill effects. Some recommendations are provided on how to avoid or overcome social media addiction.

For those interested to order this book, please click or scan the following QR code:

Scan me