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NATIONAL INSTITUTES OF HEALTH, MINISTRY OF HEALTH MALAYSIA



A FOLLOW THROUGH
Where Are We?

The cover of the NIH Bulletin magazine features the title "NIH BULLETIN" at the top, followed by "NATIONAL INSTITUTES OF HEALTH (NIH)". Below the title is a collage of images showing various NIH facilities, including a large modern building, a smaller building with a sign, and a building with a sign that reads "INSTITUT PENGURUSAN KESIHATAN UHM". To the right of the collage, the text reads "...the HUB for Health Research locally & globally".

NIH BULLETIN
NATIONAL INSTITUTES OF HEALTH (NIH)
...the HUB for Health Research locally & globally

From The Desk of CHIEF EDITOR

We enthusiastically welcome our leader, Datuk Dr Christopher Lee, Deputy Director General of Health, Malaysia and Advisor of NIH bulletin. We would like to express our heartfelt appreciation to Datuk Dr Shahnaz Binti Murad and Datuk Dr Hj. Rohaizat Bin Yon as former Advisors of NIH bulletin. Last but not the least, to Dr S. Asmaliza for her vast contribution to NIH bulletin as former Chief Editor and paved the road for us to travel from 2009 till 2019 to come up with this bulletin, "A Follow Through From The NIH Bulletin 2009: Where Are We?"

This bulletin highlight, a lot of changes took place at different level of NIH along with its six Institutes, since last ten years, including restructuring of the NIH organisation. IMR itself has evolved to specialized diagnostic and R&D activities. IPH has evolved to a centre for epidemiological

survey research and IHM towards optimizing resources within Ministry of Health. ICR expanded to 33 CRC networks at hospital level, IHSR as conjoint platforms with international agencies and IHBR extended their expertise in the field of health behavioural and promotion.

From this edition onwards, the bulletin will feature Research Predecessors as mentors and motivators for young researchers. Through direct video interviews, we hope to inspire young researchers to shine in future with many more innovation and research projects locally and globally.

I would like to express my heartfelt thanks to all to all editors, authors and contributors for their contribution to the development of this bulletin. I hope readers will obtain better insight of the NIH reform and diversity of the institutes.

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NIH

Extend Their Heartfelt Thanks To..

Datuk Dr. Hj. Rohaizat bin Hj Yon

Datuk Dr. Hj. Rohaizat bin Hj Yon was the Acting DDG of Health (R&TS) from January to April 2019 and currently promoted as DDG (Medical), MOH. He is a Public Health Specialist with a Master in Health Planning and Doctor of Philosophy (Ph.D.) in Public Health majoring in Health Management, Health Economics, and Casemix. Having served the government at various levels, he has extensive



experience in various MOH hospitals in a management position. He joined the Medical Development Division in 1990 - 1996 and Planning and Development Division, MOH from 1997 - 2008. During his 11 years in Planning and Development Division, he was a major contributor and influenced the tasks related to the 7th - 9th Malaysia Plan, National Healthcare Financing, Healthcare Reform and National Health Plan.

Subsequently, as a Senior Deputy Director of Medical Development Division in MOH, he was responsible for the planning of medical and specialty services for the nation. This includes the development of the medical profession and career pathway starting from medical graduates to subspecialties, as well as a hospital director and State Health Director. He has successfully produced incentive packages for medical officers and specialists to continue serving the government. He also refurbished the allowances incentive, introduced time-based promotion for better career development, and stabilized the specialized services in various issues such as the increasing number of specialist and subspecialist. He monitored the Continuing Professional Development training program for MOH and nationwide. Since February 2017, he held the position as the Director of Planning Division, responsible for the planning of national health plans, health facilities, e-Health, health data collection, analysis & reporting, national health accounts and health system transformation.

Being a member of various professional associations at the national and international level, he was actively



Datuk Dr. Shahnaz binti Murad

Datuk Dr. Shahnaz binti Murad was the Deputy Director-General (DDG) of Health [Research and Technical Support (R&TS)] and supervised the six research institutes under Ministry of Health (MOH) till January 2019. She graduated from the Royal College of Surgeons Ireland in 1985 and has worked in the MOH for more than 25 years. Prior to this, she was the Director of the Institute for Medical Research (IMR), Director of SEAMEO-TROPMED Regional Centre, National Head of the Pathology Service for MOH and the Executive Officer for the Inter-Islamic Network for Tropical Medicine (INTROM). In IMR, she was head of the Allergy and Immunology Research Centre. Her field of specialization in immunology has produced many specialized diagnostic tests and subsequently established the allergy diagnostic service for MOH. Besides that, she initiated the Malaysian Stem Cell Donor Registry in 2000. She has numerous publications in international journals in the field of Immunogenetics and Allergy.

Dr. S. Asmaliza Ismail

Dr. S. Asmaliza Ismail obtained her Ph.D. in Environmental Assurance for Health from the University of Western Sydney, Australia. She is currently the director of Research Policy and Planning Division, NIH. She holds numerous responsibilities such as research management for the NIH-MOH, professional support to the DDG of Health (R&TS) and coordinates activities of R&TS program under MOH. The current 2019 NIH Bulletin with the theme of "WHERE ARE WE?" is a follow-through from NIH Bulletin 2009, which she was the chief editor.



involved in research activities. He has more than 50 publications and 70 health related presentations. He authored a book on the development of health services in Malaysia, entitled 'Health in Malaysia: Achievements and Challenges'. He also authored the Health Economics book, in collaboration with Universiti Kebangsaan Malaysia (UKM), United Nation University (UNU) and Dewan Bahasa and Pustaka. It was the first book in Bahasa Malaysia that utilized local data. In collaboration with UKM & UNU, he successfully developed costing software using local data (Clinical Costing Software Modelling) that has been used in Malaysia and overseas.

INSTITUTE FOR MEDICAL RESEARCH (IMR)

INTRODUCTION

IMR was established in 1900. It has evolved from serving basic to specialized diagnostics, and from basic research and development (R&D) to advanced and specialised R&D activities.

HIGHLIGHTED ACHIEVEMENTS

a. International Collaborative Research

The researchers of IMR have been involved in international projects throughout the years. In the year 2018, two (2) international projects were initiated under the extramural collaboration: "Wolbachia based control of virus transmission by the mosquito *Aedes albopictus*" under the Wellcome Trust and "Malaysian Acute Vascular Events Risk (MAVERIK) Study: a case-controlled study of genetic, lipid and other risk factors in early-onset myocardial infarction in Malaysia" under the Newton-Ungku Omar Fund.

(A write-up on Maverik study is attached on page 9 in case it is required).

b. Global and Regional Centres of Excellence

IMR as a world-renowned premier biomedical institute of Malaysia has contributed in international roles through its close collaboration and support from the World Health Organization Western-Pacific Regional Office (WHO-WPRO). There are ten (10) Centres of Excellence in IMR including three (3) WHO Collaborating Centres which are all based in the Infectious Disease Research Centre (IDRC). These are:

1. SEAMEO-TROPMED Regional Centre for Microbiology, Parasitology and Entomology under the South-East Asia Ministers of Education / Tropical Medicine and Public Health Network (since 1967)
2. WHO Collaborating Centre for Taxonomy Immunology and Chemotherapy of Brugian Filariasis, based in the Parasitology Unit, IDRC (1985-2005)
3. WHO Collaborating Centre for Ecology, Taxonomy and Control of Vectors of Malaria, Filariasis and Dengue, based in the Medical Entomology Unit, IDRC (since 18 Sept 1985)
4. WHO Regional Centre for Research and Training in Tropical Diseases and Nutrition (since 8 Aug 1978)

RESEARCH PROJECTS, PUBLICATIONS AND PRESENTATIONS

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Research projects	115	107	83	50	78	91	93	70	59	76	82
Publications (scientific papers)	87	73	100	93	111	130	123	116	113	96	124
Reports	30	19	11	7	27	4	6	21	N/A	5	N/A
Presentations	197	123	191	179	233	194	125	222	152	176	257



Launching Of The Wolbachia Laboratory

5. Prototype of Herbal InfoHub, based in the Herbal Medicine Research Centre (HMRC) (since 20 Oct 2003)
6. Secretariat for the National Committee for Research and Development of Herbal Medicine (NRDHM) (since 2002)
7. WHO Western Pacific Region Index Medicus (WPRIM) Project (Collaborative effort of Western Pacific Regional Office (WPRO) with Global Health Library (GHL) (since 2007)
8. Global Information Hub on Integrative Medicine (GlobinMed), based in HRMC (since 17 Jul 2007)
9. National Focal Point for the WHO Collaborative Surveillance Programme on Antibiotic Resistance in the Western Pacific Region, based in the Bacteriology Unit, IDRC (since 1989)
10. Secretariat for the Inter-Islamic Network for Tropical Medicine (INTROM) (since 1 Jul 1988)
11. WHO National Poliovirus Laboratory, based in the Virology Unit, IDRC (since 1993)
12. WHO National Influenza Centre, based in the Virology Unit, IDRC (since 1966)

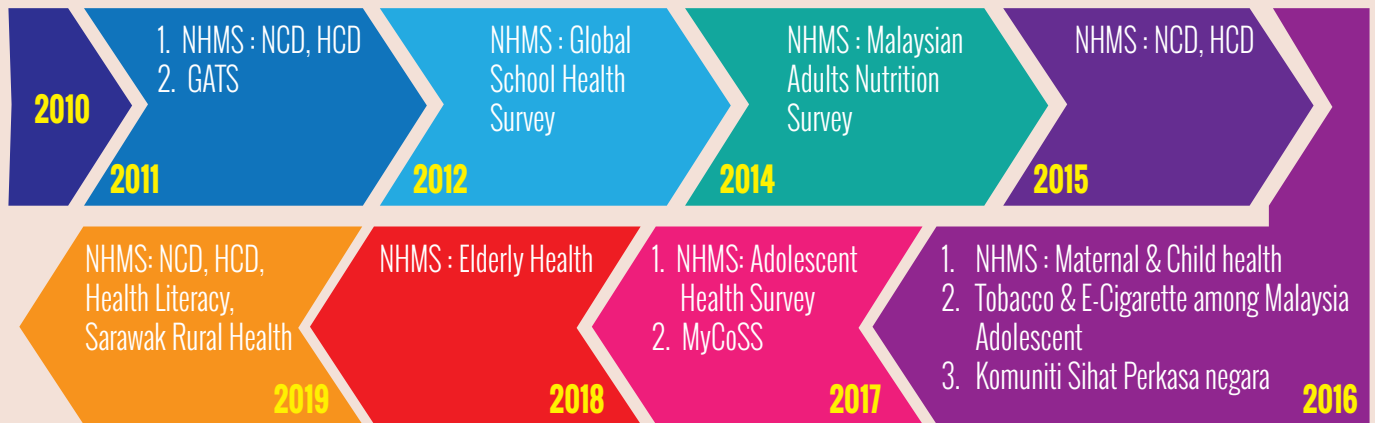
INSTITUTE FOR PUBLIC HEALTH (IKU)

Over the years, IKU has evolved from an institute focusing on public health research in general to a centre for epidemiological survey research. The training and consultation activities were also grown as the vision and mission of the institute changed as follows:

RESEARCH PROJECTS/ ACHIEVEMENTS:

Since 2011, IKU is more focused on doing research related to community survey. National Health and Morbidity Survey (NHMS) is done in a 4 year cycle. Every first year of the cycle will capture information on non-communicable diseases (NCD) and healthcare demand (HCD). The focus for the subsequent years are decided by priorities set by policymakers and stakeholders. Apart from NHMS there are also other national surveys conducted.

Prior to 2010	After 2010
<p>Vision – to be the centre of excellence in public health research so as to enhance health and quality of life for the nation</p> <p>Mission – to promote health, well being and quality of life for the community through public health research, training and consultancy services. This will be achieved by:</p> <ol style="list-style-type: none"> 1) Conducting, coordinating and assisting in research 2) Offering focused training and learning programmes 3) Providing consultancy services in public health 4) Fostering strategic partnerships with relevant organizations both nationally and internationally. 	<p>Vision – to be the authority and leader in epidemiological survey research, training and consultation.</p> <p>Mission – to provide information on population health to stakeholders and policy makers for evidence-based policy making through:</p> <ol style="list-style-type: none"> 1) Leading in national epidemiological survey research 2) Providing training related to epidemiological survey research 3) Being a reference centre for epidemiological research 4) Creating smart partnership and collaboration with national and international organizations.



In the past 10 years, Institute for Public Health has conducted over 70 research projects, including systematic and scoping reviews. Institute for Public Health also collaborates with other organizations such as other NIH institutes and universities in various projects. Around 250 articles have been published in international and local journals and over 300 technical reports, infographics, research highlights, factsheets and abstracts in supplements were produced. The research outputs have been disseminated through various platforms such as conferences, seminars and meetings with over 600 presentations. About 500 consultations has been provided to the Ministry of Health, local and international organizations. Institute for Public Health also looks for extramural opportunities to conduct research. The extramural grants secured as following:

Name of Project	Sponsor
Global Adults Tobacco Survey	World Health Organization
Global School Health Survey	World Health Organization
My Body is Fit and Fabulous at Home: An Intervention Study to Combat	Sackler Institute for Nutrition Science & Malaysian Industry-Government Group for High Technology (MiGHT)
Obesity among Housewives Living in Klang Valley (MyBFF@Home) Malaysian Community Salt Study – MyCoSS	Medical Research Council United Kingdom & Academy of Sciences Malaysia
Mobile Health for Child Injury Prevention in Malaysia (M-CHILD)	Johns Hopkins University
Translation and Adaptation of Child Disability Questionnaire in Malaysia	UNICEF



INSTITUTE FOR CLINICAL RESEARCH (ICR)

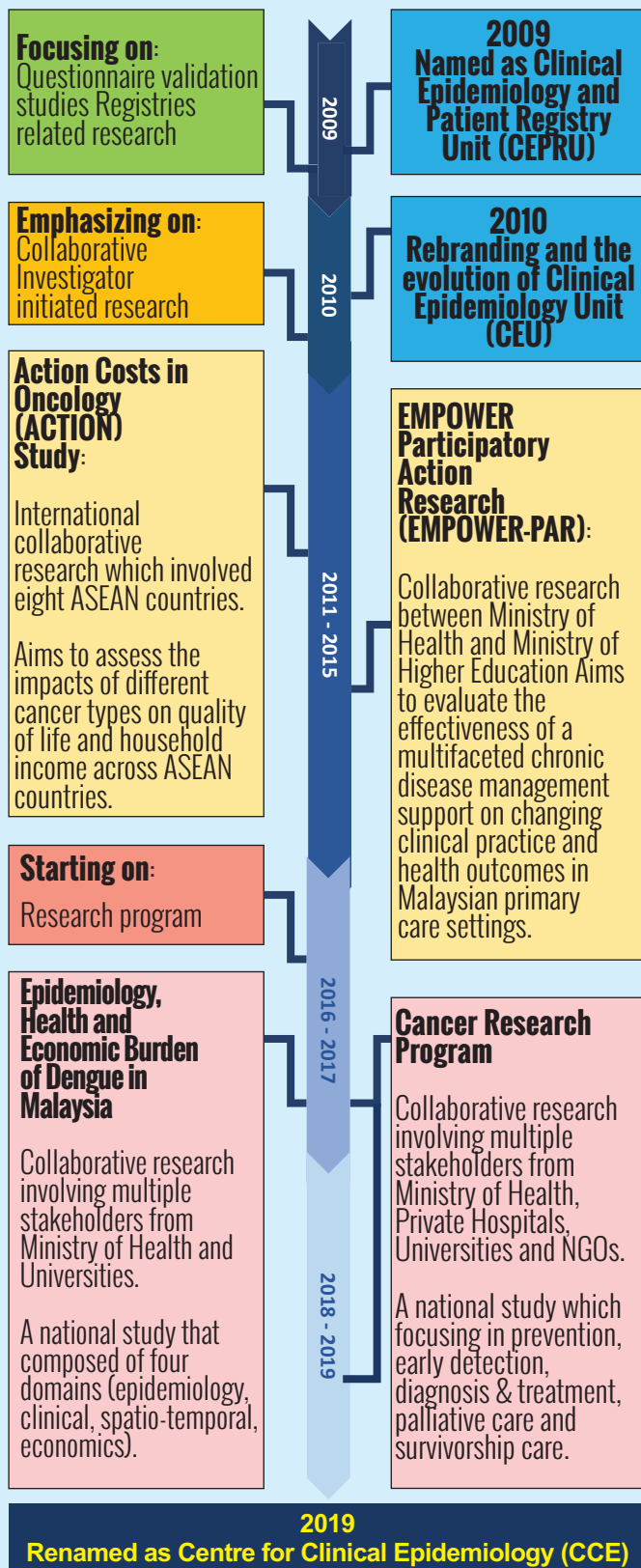


Figure : 10 year journey of CCE

Centre for Clinical Epidemiology (CCE) is one of the centres under Institute for Clinical Research (ICR). Over the past 10 years, CCE has contributed significantly to the country's healthcare system through its efforts in supporting various clinical registries, as well as through various research works done specifically in the area of cancer and dengue.

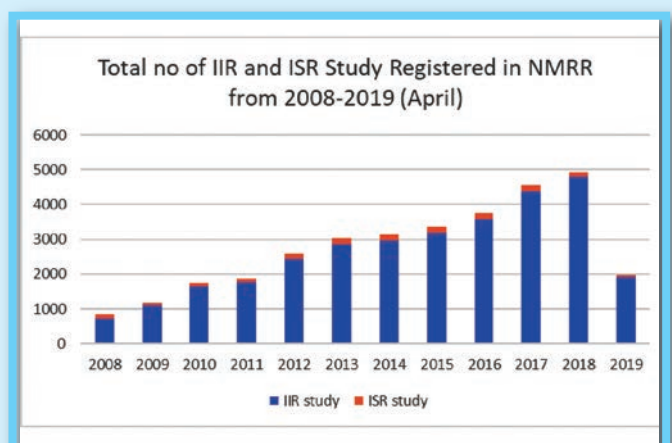
Past: Findings from ACTION study were utilized in government initiatives such as PEKA and MySalam. Currently, next steps have been taken to reform SOCSO for the welfare of cancer patients. Besides that, findings from dengue research has influenced the decision on registration of Dengvaxia in Malaysia.

National Medical Research Register (NMRR)

Since its endorsement on 5 September 2007, NMRR has evolved from a simple platform for Directory of Medical Research and Directory of Clinical Investigators and Researchers into an integrated and comprehensive platform. These days, research registration, Ministry of Health Research Grant (MRG) application submissions, the ethical application submissions to Medical Research and Ethics Committee (MREC), notification to other institutional research boards/institutional ethics committees (IRB/IECs), notification to National Pharmaceutical Regulatory Agency (NPRA) as well as application for publication approval can be performed online.

NMRR has transformed to incorporate the needs of researchers and local regulators. Among the major upgrades that have taken place are the submission of study amendment, renewal and closure, Serious Adverse Events (SAEs) and Suspected Unexpected Serious Adverse Reactions (SUSARs) and Protocol Deviation (PD) reporting. With these transformations, the process of ethical submission, review and approval timeline have been improved. In addition, researchers will be able to keep track of their study status and ensure their compliance to Good Clinical Practice and the requirements of local regulatory.

Throughout the years, NMRR has received over forty thousand research registrations from local and foreign researchers. Up to April 2019, NMRR has registered 33,236 research projects and 46,242 researchers in its directories. NMRR has processed 13,500 applications for ethics approval from MREC with 1,536 (11.35) applications from industry sponsored research (ISR). The number is expected to increase over the years as more and more researchers are initiating research in their respective fields in order to provide a more holistic and advanced medical care delivery to the public. Industries have shown their interest in making Malaysia as the site of choice for conducting clinical trials. The accessibility of online platform has massively cut down submission and processing timelines. NMRR is currently under the purview of Research Policy & Planning Division, NIH. Among the development that is currently underway for NMRR is the Development of NMRR version 2.0 for a more stable, user friendly and efficient system.



Present: CCE has put in more focus in the area of cancer as it recognizes that the mortality and morbidity burden of cancer is increasing in the country. Therefore, collective research works are being done in line with the main pillars of national cancer control program namely: prevention, early detection, diagnosis and treatment, palliative care and survivorship care.

Future: As a way forward, CCE plans to work together with fellow clinicians and healthcare policy makers to carry out patient-oriented researches that provide high quality and timely evidences in different disease areas. This will ultimately help to bridge the gaps between clinical practice and health policy in the best interest of patients in our country.

Centre of Clinical Outcomes Research (CCORe)



In view of the rising stroke burden in Malaysia and the paucity of local multicenter research on stroke, the CCORe has undertaken to explore this debilitating disease via research.

Amongst current projects are estimations of stroke incidence, 28-days mortality and risk of early readmission from stroke in Malaysia as well as predicting the outcomes of different antiplatelet therapies for secondary prevention after an ischemic stroke or transient ischemic attack. Both projects are carried out via collaborations with various data centres, including the National Registration Department, Health Informatics Centre, National Stroke Registry, Universiti Kebangsaan Malaysia Medical Centre and a number of hospitals around Malaysia.

Following these projects, a Stroke Expert Panel Meeting involving clinical experts and researchers from Ministry of Health, Ministry of Higher Education and private hospitals was held on the 10th of April 2019 at NIH to discuss preliminary findings of these research projects and to look for potential areas for future stroke research. Results on local stroke metrics were also presented as a plenary in the 1st Malaysian Stroke Conference as was the usage of stroke registry and data linkage for comparative effectiveness research as a shortlisted oral presentation. Plans are underway to hold an Idea Generating Workshop to inspire more ideas pertaining to expanding stroke research. Through its research in stroke, CCORe seeks to translate research into clinical practice, fulfilling ICR's aim of embarking on research that matters to patients.

Centre for Clinical Trial (CCT)



CCT has been independent since year 2014. We comprise of 3 doctors, 7 pharmacists and 5 nurses. We have successfully completed 26 bioequivalent and 3 early phase studies.

Our proudest achievement thus far was our phase 1 DNDi study of Ravidasvir and Sofosbuvir that we successfully completed in 2018. This drug combination is aimed at curing Hepatitis C. The DNDi team wishes to improve drug affordability and accessibility from USD\$100,000 to USD\$300. We are stoked to be the only center in Malaysia to fully complete the intense pharmacokinetic study and with high quality data too.

Through the years, we have had collaborations with Veeda-India, Attest Sdn Bhd, Hovid Bhd, UiTM, Ampang Medical and Hematological Department. We have also welcomed both local and international visitors from Switzerland (DNDi), USA (Amneal), Korea (Inje University, C&R Research), Japan (Chiba University), Canada (Bellus Health), Singapore (Servier, Eli Lilly), India (Aurigen),



Dr Reddy), Vietnam (Vietnam Ministry of Health), Indipharm (Local) and Taiwan (Clinipace) to our humble abode.

What's next for us? Currently we have 23 studies lined up till 2019 in our pipeline and counting. We hope to continue growing from strength to strength. We are steadfastly building up our track record and will continuously strive towards our vision of being a Phase 1 Centre of excellence.

INSTITUTE FOR HEALTH MANAGEMENT (IHM)

CLUSTER HOSPITAL INITIATIVES

Cluster Hospital is one of the high impact initiatives from the Ministry of Health (MOH) Malaysia whereby hospitals within a state, are grouped by geographical locations and are aligned in term of patient flow and services. In a Cluster, the Specialists or State Hospitals serve as the Lead Hospital and other smaller or district hospitals take the role as the Non-Lead Hospitals. Each Cluster share resources, facilities, manpower and equipment. In year 2014, Cluster Hospital pilot projects were officially implemented at three pilot sites; i.e. Pahang Tengah, Melaka and Tawau. To date, there are 25 Clusters officially launched nationwide with many more to be established in the future. This cluster hospital initiatives have achieved reduced waiting time for surgery and procedures due to better utilisation of resources and facilities, increased competency level of healthcare staff, especially in district hospitals, and provision of specialist care closer to home for patients living in the outskirts.

IHM has been closely involved in the Cluster Hospital initiative since its inception. IHM plays an active role in introducing the Action Research (AR) framework which is applied in Cluster Hospital implementation during the planning, action and evaluation phase. AR is chosen as it offers flexibility and could cater to the vastly different scenarios in each Cluster. The AR approach emphasises strongly on the conduct of situational analysis supported by data, prioritisation of the identified issues as well as selection and engagement of relevant stakeholders. Besides that, AR promotes a bottom-up approach which empowers project members and instills sense of ownership for decisions made and actions taken. There are more than 1000 health personnel directly involved in the Cluster Hospital initiative throughout Malaysia and have participated in the AR workshops organised by IHM. Two AR seminars were organised by IHM in 2016 and 2018 respectively, providing a platform for the Clusters and stakeholders to gather and exchange experience and opinions.

Apart from training, IHM had conducted few research projects on Cluster Hospital initiatives as part of the evaluation:

- Cost-Effectiveness Analysis of Cluster Hospital Pilot Projects in Transforming the Healthcare Service in Malaysia),
- Patients' Experience on Cluster Hospital implementation
- Exploring the Barriers and Boosters towards Cluster Hospital Sustainability among Healthcare Providers

Findings from these research projects provided evidence for further improvement and the related research findings had been presented and published.

The application of AR and the achievements are documented in the Compilation Reports on of the Cluster Hospital Pilot Projects Implementation. Cluster Hospitals for later batches, namely Kedah Utara, Seberang Prai, Kelantan Utara and HTAN Clusters was published in 2018. The latest compilation report showcases the newest Clusters which have shown a high level of dedication, endurance and excellent achievement. The fourth edition of Action Research Training Module was produced by IHM, incorporating examples on the application of AR in Cluster Hospital initiatives training module.



Presentation on Cluster Hospital Initiative at the International Hospital Federation (IHF) 42nd World Hospital Congress 2018 in Brisbane, Australia

TRANSFORMING GREAT POTENTIALS THROUGH TALENT GROOMING PROGRAMME (TGP)

TGP is a specifically tailored talent management programme for technical healthcare professionals to become future leaders of the MOH Malaysia. TGP was established in June 2014, after months of extensive planning, brainstorming, constructing frameworks and processes with various leaders and experts, from different divisions, institutions and technical fields. IHM was given the task as the TGP Secretariat, which monitors, coordinates and runs the programme.

Until 2018, TGP has recruited 164 talents out of which 33 of these talents have completed the programme. TGP is based on the principle of five competency domains, namely leadership, communication and relationship skills, organizational governance, professional and personal values to complement their technical competency. In addition to the formal courses, TGP also supports informal learning through active involvement of the talents' supervisors. During the programme, the Talents are required to plan, conduct and complete a research project relating to their field.

TGP is a long-term investment plan by the ministry to improve health system performance and the health status of the nation through effective leadership. The programme will also contribute to the succession planning within MOH with more well-equipped and skilled healthcare professionals to lead the organization. The Director General of Health has also urged all healthcare professionals to proactively upgrade their knowledge and communication skills to become leaders at every level of the ministry. TGP also enhances networking and knowledge sharing between Talents from various fields and programmes which is fertile ground for buds of new collaboration.

TGP is proud to be one of the initiatives listed under Thrust 1: Harnessing Talent for Transformation Plan for Public Service in 2015. In 2017, TGP was one of the eight MOH innovations that made its way to one of the finalists in the Prime Minister Innovation Award. Over the years, more smart partnerships have been built with local agencies, institutes and international organizations such as the Razak School of Government, National Institute of Public Administration (INTAN), Genovasi Malaysia, Royal College of Physician (London, UK) and the NHS Leadership (UK).

TGP has successfully achieved its desired goals for MOH. It is now looking to expand to become a world-renowned leadership academy by continuously grooming great potentials.



LEAN HEALTHCARE INITIATIVE IN MINISTRY OF HEALTH (MOH) HOSPITAL

Lean healthcare initiative was introduced in 2013 at Hospital Sultan Ismail, Johor, aiming to reduce waiting time at the Orthopaedic and Oncology specialist clinics. Following its success, the initiative was expanded to other hospitals within MOH. The implementation framework is divided into three stages;

- Stage 1 - Training Lean Healthcare,
- Stage 2 - On-Site Consultation, Monitoring
- Stage 3 - Analysis, Reporting and Presentation to Stakeholder

Respective hospital staff were given training on development of Value Stream Mapping (VSM) to map their work processes, identify non-value-added activities and generation of Kaizen (ideas of improvement).



INSTITUTE FOR HEALTH SYSTEMS RESEARCH (IHSR)

TREND AND EVOLUTION

IHSR is committed to creatively translate evidence into policy towards advancing Nation's Health through Health Policy and Systems Research (HPSR)

THE BEGINNING: LAYING THE FOUNDATION

Before its establishment in 2002 as an independent Institute under the National Institutes of Health Malaysia, IHSR was a unit in 1987 and later a division in 1992 under the Institute for Public Health. IHSR was designated as the World Health Organisation Collaborating Centre (WHOCC) for Health Systems Research in 1988 and the scope expanded to WHOCC for Health Systems Research and Quality Improvement in 2001. The designation was renewed every four years. In 2017, IHSR was successfully re-designated as World Health Organisation Collaborating Centre (WHOCC) for Health Systems Research and Quality Improvement for the year 2017-2021.

EARLIER WORK: PART OF A BIGGER PICTURE

IHSR has collaborated with numerous parties and organisations in conducting researches and secretariat works such as:

- The Institute was designated as Quality Assurance (QA) Secretariat, Ministry of Health Malaysia (2000). The first National QA Convention was in 2001, and subsequent 2 yearly.
- The Institute worked on development of Health Research Priority Areas via Health Research Priority Settings (2011-2015).
- Healthcare Demand Analysis using National Health and Morbidity Survey (NHMS) data provides useful evidences related to universal access to healthcare and financial risk protection. From 2015, IHSR was given the honour to lead and conduct Healthcare Demand
- Lean Healthcare Initiative (LHC) was introduced in 2013 to address issues of congestion and long waiting times in MOH facilities. IHSR was given the task to monitor and evaluate the performance of the initiative.

CURRENT TREND & WAY FORWARD: SETTING THE STAGE AT GLOBAL LEVEL

HPSR Module Development

IHSR is responsible for providing technical support in the development and application of tools and methodologies in Health Systems Research and building capacity in Malaysia, as well as in the Western Pacific Region (WPRO) countries. IHSR sought consultancy from the London School of Hygiene and Tropical Medicine, United Kingdom (LSHTM) and works towards development of a Health Policy and Systems Research (HPSR) module and training programme. IHSR develop such module using competencies as the foundation and measurement of training outcomes. This development was shared during the 5th Global Symposium on Health Systems Research at Liverpool, United Kingdom (2018) and the Module is set to be used for nationwide HPSR training.

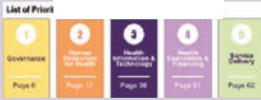
Implementation Research

Implementation research is an integrated concept that links research and practice to accelerate the development and delivery of public health approaches. IHSR had the opportunity to co-host and receive intensive training on Implementation Research. Subsequently, IHSR is set to lead the promotion, advocacy, research conduct as well as trainings of Implementation Research methods in Malaysia and WPRO countries.

MALAYSIAN ALLIANCE FOR EMBEDDING RAPID REVIEW IN HEALTH SYSTEMS DECISION MAKING (MAERA)

In 2018, IHSR responded to a call for proposals by the Alliance for Health Research and Policy, to establish a platform, known as MAera for Rapid Evidence Synthesis to support health systems decision making in Malaysia.

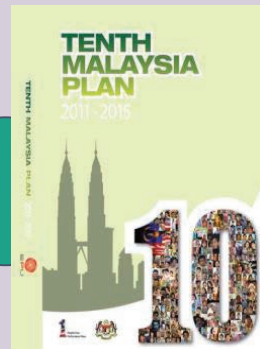
National Institute of Health,
Setia Alam



Advancing Universal Access & Quality Health as Health Research Priority under the 11th Malaysia Plan



IHSR Health Research Policy



From 2011 to 2015



develops Health Research Priority Areas

via Health Research Priority Settings (HRPS)

Based on WHO's health systems building blocks IN THE 10TH MALAYSIA PLAN



IHSR Centres 2019

- Centre for Health Policy Research
- Centre for Health Equity Research
- Centre for Health Outcomes Research
- Centre for Health Quality Research
- Centre for Health Economic Research
- Centre for Health Services Research



2018

QA Convention



2017



LEAN Healthcare

2014

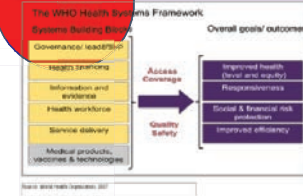


2013

Move to Setia Alam

In 2007

WHO Introduces Health Systems Building Blocks



2002

Member of NIH



2001

First QA Convention (Held every two year)

International

National



Consultancy Examples

2000

Designated as WHO-CC for Quality Assurance Improvements (QA/I)

2000

Designated as National QA Secretariat



Since 1988

Designated as WHO Collaborating Centre (WHO-CC) for Health Systems Research (Current designation from 2017-2021)

1987

Train in Health Systems Research Methods

Formation of Health Systems Research Programme

What is Health Systems Research?

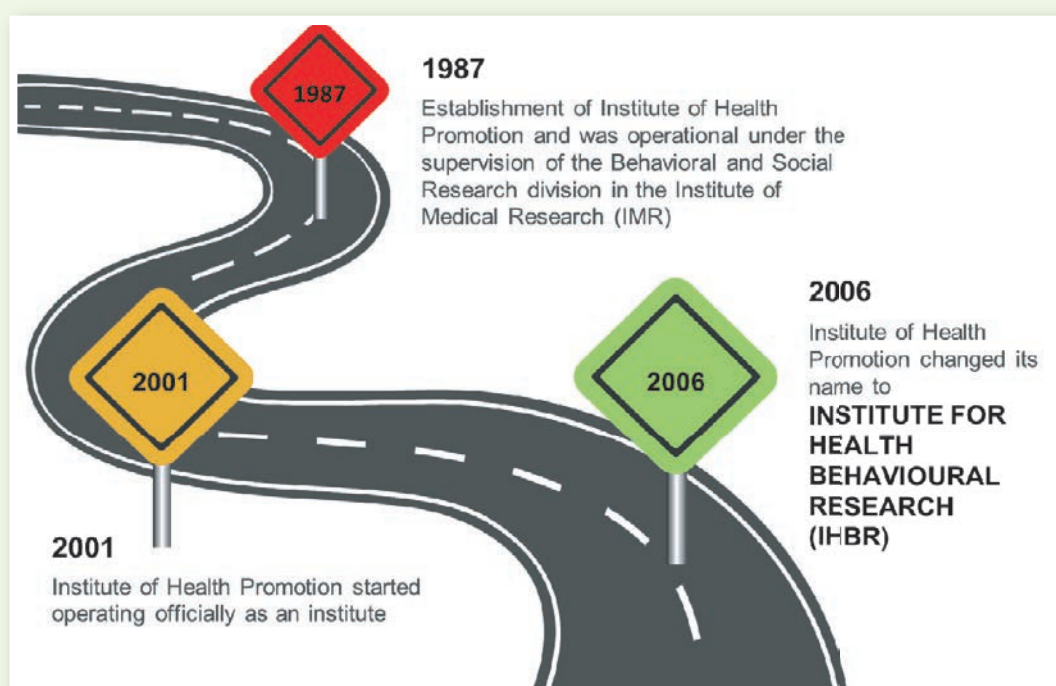
- Focuses on systems problems
 - To improve performance as a whole
- Aims to answer relevant policy questions and generate valuable evidence that is translatable to practice
- Highly multidisciplinary, co-ordinating collaboration with key experts as well as stakeholder engagement

INSTITUTE FOR HEALTH BEHAVIOURAL RESEARCH (IHBR)

EVOLUTION OF IHBR

Established in 2006, IHBR was initiated following the merger of the Institute for Health Promotion (IPH) and Health Education Unit of the Institute for Public Health (IPH). The institute started with only five officers and one administrative assistant. Subsequently, expanded into an institute of 30 strong manpower who are trained in conducting research, training Health Education Officers (HEO) and consulting in behavioural sciences. This upcoming September 2019, IHBR will begin the training of the newest intake of HEO. IHBR will continue to produce competent and quality Health Educators.

The core function of IHBR is to carry out research, training and consultancy in the field of health behavioural and promotion, specifically on health behavioural surveillance, interventions, assessment tools, programme evaluation, health informatics, health and risk communications. On top of that, IHBR intends to increase its training collaborations among institutions, agencies, universities, NGOs and international bodies. Today, IHBR has five main centres which are formed based on specific specializations as seen below:



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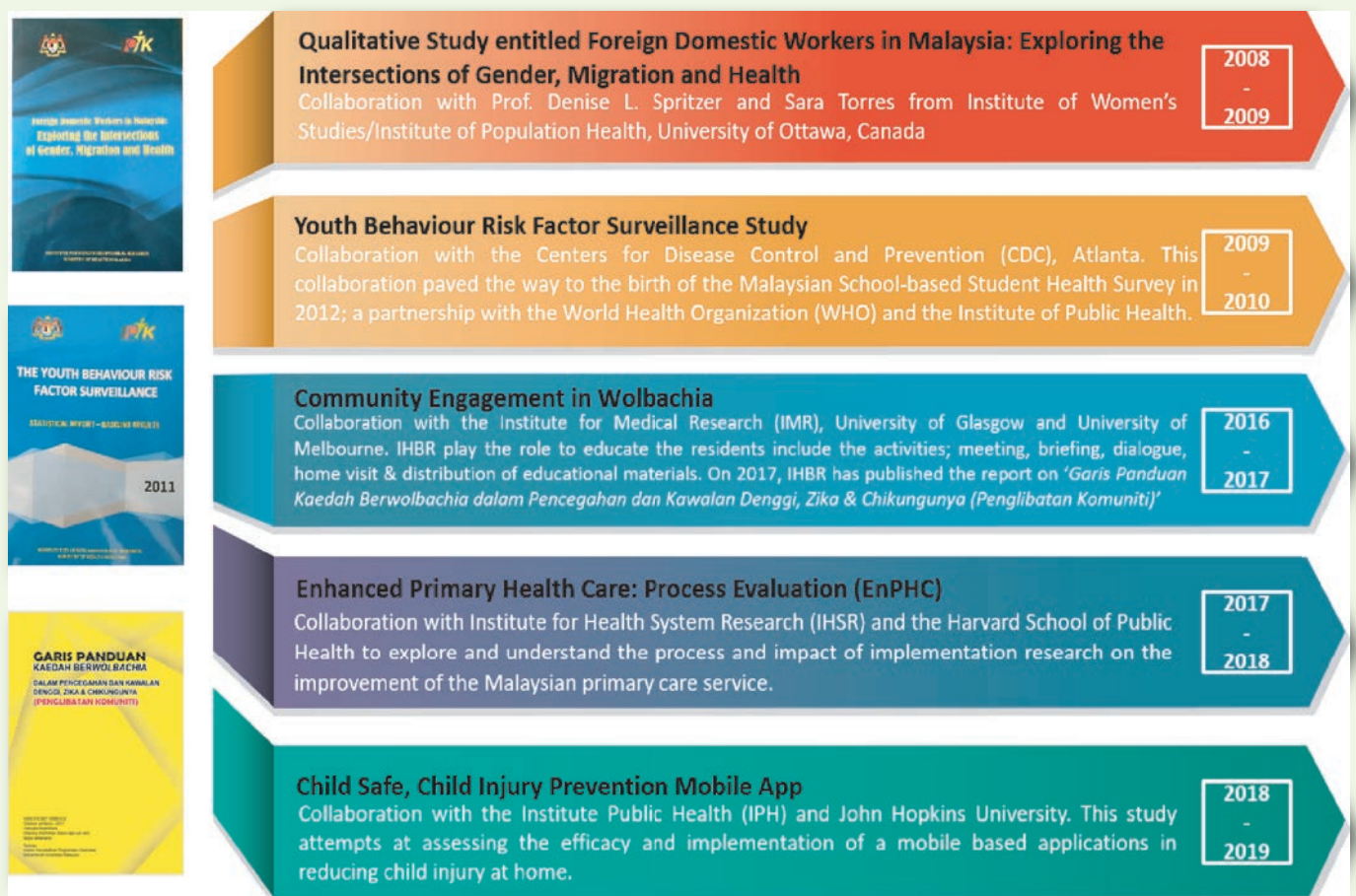


MALAYSIAN LANDSCAPE

IHBR conducted several researches following the requests from various stakeholders such as Effectiveness and Sustainability of COMBI Approach as a Community-based Intervention in Controlling Dengue, the Effects of Messages Frames in Controlling Obesity amongst Diabetes Patient, Cluster Randomized Trial of an Enhanced Smoking Cessation, Treatment Programme to Aid Smoking Cessation Compared with Brief Behavioural Support and Preliminary Study of Physical Activity Consultation as an Adjunct to Standard Smoking Cessation Treatment in the Context of Malaysia (2011 – 2013).

Under the 11th Malaysia Plan Health Research Priority area (2016-2020), IHBR conducted several projects under Non-Communicable Disease Research Cluster. Among them were the perception on the use of e-cigarette and study on Health Information Seeking Behaviour among Elderly who Use the Internet in Malaysia with the cooperation of Department of Social Welfare, Ministry of Women, Family and Community Development, Putrajaya.

INTERNATIONAL COLLABORATION



QUALITATIVE RESEARCH AND HEALTH BEHAVIOURAL INSTRUMENTS

IHBR is currently building expertise on qualitative research to be the national resource centre with recognised experts on qualitative research methodologies.

IHBR aims to develop health behavioural instruments as a tool for researchers or end-users to collect evidence-based data. IHBR get the exposure and experience on Health Literacy research and established linkage with University of Queensland, Australia. The Institute had also obtained the copyright registration with MyIPO on "Malaysian Version the Test of Functional Health Literacy in Adults (MY-TOFLA)" in 2015.

Research PREDECESSORS



DR HAJI TAHIR BIN ARIS obtained his medical degree in 1989 and completed his Master of Public Health (Occupational Health) in 1994 at Universiti Kebangsaan Malaysia (UKM). As a Public Health Specialist, he worked in various organizations and was involved in numerous projects especially in Survey Research since 1995, developing his expertise in Research Methodology and Medical Statistics. He was then appointed as the Director of the Institute for Public Health in January 2010. He has contributed in multiple national surveys and studies, leading towards recognition of his experience and expertise

not just nationwide, but also by the World Health Organization (WHO).

He is a sought after speaker and facilitator in areas pertaining to Research Methodology, Data Management & Statistics. Since 2002, he has been involved in many Geographic Information System (GIS) projects, one of which was mapping health facilities and services for Ministry of Health policy decision making.

To date he has published more than 80 peer-reviewed articles in local, regional and international journals and more than 100 conference abstracts on various topics especially around health systems research, epidemiology and instrument validation. He was also involved in producing more than 60 technical reports and proceedings.

Interview Video: <https://youtu.be/q12FMW3q32A>



Scan me

Dr Nazni Wasi Ahmad

after completion of her Masters in Science from University of Malaya, started her career as a researcher in 1993 in the Unit of Medical Entomology at the Institute for Medical Research. She earned her Philosophy of Doctorate also from University of Malaya. She loves to work with mosquitoes and virus. But, at that time, the vacancy to work on mosquitoes and virus was already occupied by other officers, so the senior officers asked her to work on two pairs which was not taken up by anyone – the cockroaches and the flies. She has a fear of cockroaches so she took up flies, although she is naturally a very clean person. The initial purpose was to control the population as it is a cosmopolitan nuisance in Malaysia. However, as she dug deeper, she realised that there is a lot of potential. So, she started with the source, problem and how to control it. So, they basically found the source to be the poultry farm which faces the biggest problem due to its resistance. So they had to find other new methods of controlling them. At her earlier career pathway had great interest in fly control and focused her research on diseases-bearing insects and insect therapy research. She as a Senior Research Officer in Ministry of Health and Malaysia's top forensic entomologist showed how insects on a corpse can provide useful clues on the death. Then developed her skill in forensic entomology and also in maggot debridement therapy. She engages openly to new ideas and does not give any negative and discouraging excuses. She had displayed great interest and enthusiasm in all the research projects she was involved in. She motivates and inspires junior researchers to explore research and mentors them with the altruistic aim of nurturing young scientists to pursue their scientific ambitions for the betterment of mankind. It was evident that the Confucian philosophy on "the essence of knowledge is having it, to apply it" was adopted and practised well by Dr Nazni in her translational research. She was recognized with the prestigious award for her exceptional work of healing diabetic wounds and preventing limb amputation, indeed she is the pride of our nation. She made Malaysia Proud!



Scan me

Interview video: <https://youtu.be/grSd4gEUWK8>

Research UPDATES

National Health and Morbidity Survey (NHMS) 2018

Elderly Health was part of NHMS V (2015-2018). The objective of this survey was to provide health related community-based data and information to the Ministry of Health to review health priorities, programme strategies and activities, and to plan for the allocation of resources for elderly health care services.

This survey was conducted nation-wide, targeting elderly for the first time. Data was collected via face-to-face interview at respondent's homes using mobile devices with various assessments done based on topics. A total of 5,636 living quarters were approached with 7,117 respondents successfully interviewed, of whom 3,977 were elderly aged 60 years or more (≥ 60). The interviews were conducted by trained personnel from the Institute for Public Health.

Among salient findings, more older persons were found living alone, at 1.9% among pre-elderly aged 50 to 59 years and 6.3% among elderly aged ≥ 60. Among the elderly, 27.7% reported having been medically diagnosed to have diabetes mellitus, 51.1% with hypertension, and 41.8% with hypercholesterolaemia. Functional limitation in performing activities of daily living was reported at 17.0% among elderly compared to 3.8% in pre-elderly, while dependency in terms of instrumental activities of daily living was 42.9% among elderly compared to 21.3% among pre-elderly. Elderly who are overweight and obese were 37.0% and 17.6% respectively, while 5.2% were malnourished or at risk of malnutrition, and 10.0% experienced food insecurities. An estimated 24.3% of pre-elderly and 30.8% elderly reported poor social support, while 9.0% of elderly reported experiencing abuse by someone known to them. In terms of mental health, 5.3% of elderly screened positive for depression and 8.5% for dementia.

The poster for the National Health and Morbidity Survey (NHMS) 2018 features a purple and yellow color scheme. At the top, it displays the slogan "KERJASAMA ANDA AMAT DIHARGAI" (Your cooperation is greatly appreciated) in Malay, English, and Chinese. Below this, it lists the survey title in Malay, English, and Chinese: "KESIHATAN WARGA EMAS NATIONAL HEALTH & MORBIDITY SURVEY 2018 ELDERLY HEALTH 2018 国家健康与发病率调查 乐龄人士健康状况". The poster includes the logo of the Institute for Public Health (IPH) and the Ministry of Health (MOH). A central image shows a group of people, including healthcare workers and community members, engaged in a discussion. At the bottom, contact information for the Institute for Public Health is provided, including the address (Jalan Bangsar, 50590 Kuala Lumpur), phone numbers (03-22979695 / 03-22979545), email (nhms.elderly2018@gmail.com), and website (www.iku.gov.my).

This information sheet provides a detailed overview of the survey in three columns: English, Malay, and Chinese. The English column includes sections for "PENGANTARAN" (Introduction), "PENDUDUK TERLIBAT" (Residents Involved), "AKTIVITI TINJAUAN" (Survey Activities), and "TEMPOH TINJAUAN" (Survey Period). The Malay column includes "Pengenalan", "Penduduk Terlibat", "Aktiviti Tinjauan", and "Tempoh Tinjauan". The Chinese column includes "简介", "牵涉居民", "调查活动", and "调查期限". The sheet also features a section for "MELIPUTI KEDAMIAN-KEDAMIAN YANG TELAH TERLIBAT SECARA BAWAK DI SELURUH MALAYSIA KETIKA AKTIVITI PENYENGAJUAN DAN PENANDAN RUMAH-RUMAH TERLIPAH PADA JULAI - OGOS 2018" (Involving randomly selected households nationwide during the listing activities conducted in July - August 2018).

Research collaboration between the Institute for Medical Research (IMR) and University of Cambridge, United Kingdom (UK)

Malaysian Acute Vascular Events Risk (MAVERIK) Study: a case-controlled study of genetic, lipid and other risk factors in early-onset myocardial infarction in Malaysia

MAVERIK Study was a collaborative research effort between the Nutrition, Metabolism and Cardiovascular Research Centre (NMCRC) at IMR and the Cardiovascular Epidemiology Unit, Department of Public Health and Primary Care at the University of Cambridge, UK. The MAVERIK Study received its funding from the Newton-Ungku Omar Fund for UK-Malaysia Bilateral Health Research Collaboration in Non-Communicable Diseases (NCDs), sponsored by the Academy of Sciences Malaysia and Medical Research Council, UK.

The study aimed to establish the first large-scale scientific bioresource in Malaysia. The MAVERIK Study was a multi-centre study, involving cardiologists, physicians and nurses from 17 MOH hospitals throughout the country. The primary objective was to determine potential genetic and biochemical risk factors of early-onset heart attacks in the Malaysian population. Its secondary objective was to determine lifestyle-related cardiovascular risk factors. The IMR research team included nine medical officers and one science officer from NMCRC. Data collection to achieve a sample size of 5000 study participants began in June 2017. Research assistants were placed at some hospital sites to facilitate data collection.

EVALUATION OF ENHANCED PRIMARY HEALTHCARE (ENPHC): A POPULATION BASED STUDY, PROCESS EVALUATION & FACILITY SURVEY



Non-communicable diseases (NCD) lead to substantial mortality and morbidity worldwide. Malaysia is currently experiencing the epidemic of NCDs. In response to this challenge, an intervention package known as EnPHC has been designed by the MOH to improve the primary healthcare service delivery. This is the first comprehensive enhancement of primary healthcare programme in Malaysia involving multiple level of healthcare such as community, primary, secondary and tertiary care. EnPHC intervention framework consists of three key pillars; 1) Community empowerment and health awareness, 2) Person-centered care bundles and 3) integrated care networks. The intervention was

piloted in 20 healthcare clinics in Johor and Selangor. The implementation research was conducted to assess the degree to which the intervention is implemented as intended, its reach and impact on key processes and outcomes. In measuring the impact of the intervention, 20 matched control health clinics were selected. The evaluation of EnPHC was divided into outcome and process. The outcome evaluation was done



through population-based and facility-based survey at the pre and post intervention. The process evaluation was done through qualitative studies on patients and healthcare providers.

The population-based survey aimed to evaluate the effectiveness of EnPHC intervention on screening, undiagnosed and NCD risk factors. This is a repeated cross-sectional study in the same targeted population comparing between intervention and control group. The Facility based survey (EnPHC-EVA: Facility) is a quasi-experimental controlled study. The objectives were: 1. To evaluate the impact of the EnPHC on quality of care and clinical outcomes among Type

2 Diabetes Mellitus (DM) and Hypertension (HPT) patients 2. To evaluate the impact of EnPHC on patients' experience and providers' job satisfaction 3. To explore the management of Type 2 DM and HPT.

The Process evaluation survey (EnPHC-PE) was a mixed method study. The objectives were: 1. To explore the readiness to change among healthcare providers (HCPs) 2. To explore issues encountered during the intervention period 3. To assess patients' and HCPs perception on intervention implementation. Data collection was conducted via in-depth interviews, focus group discussions and structured observation using checklist. Findings from these studies can provide the direction towards its implementation of the programme on national scale.

Event UPDATES

The IMR Open Day and Fun Run were organized to improve the visibility and promote IMR as a premier biomedical research institute in Malaysia.

IMR Open Day (9 October 2018)

The event was launched by the Deputy Health Minister, YB. Dr. Lee Boon Chye. It attracted 2000 participants in various activities including research exhibits, laboratory visits, school innovation competition, Biomedical Museum and library tour, health screening and blood donation drive. The school innovation competition involved 29 schools (11 primary and 18 secondary). The 5 best innovations were given cash prize, trophy and certification of appreciation.

IMR Fun Run (24 November 2018)

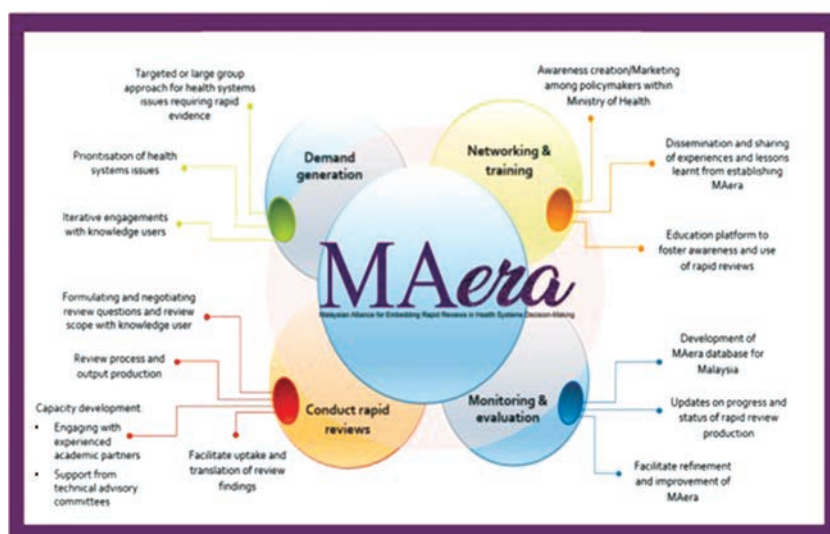
The event was launched by the Deputy Secretary-General (Management) Ministry of Health, YBhg. Dato' Hj. Hasnol Zam Zam bin Ahmad and attracted 1200 individuals. It received support from Hospital Kuala Kubu Baru, Angkatan Pertahanan Awam Malaysia (APM) and Jabatan Sukarelawan Malaysia (RELA). Funds collected from this event were donated to the "Gabungan Anak-Anak Palsi Serebrum (GAPS)".



MAera
Malaysian Alliance for Embedding Rapid Reviews in Health Systems Decision-Making

Background

Institute for Health Systems Research (IHSR) is the primary health systems evidence generator in the NIH. IHSR hopes to further strengthen this role through building its capacity and capability in Knowledge Translation (KT) in health policy and health practice research. Rapid reviews are a type of knowledge synthesis in which the steps of a systematic review are streamlined or accelerated to produce evidence in a shortened timeframe. It is timely, affordable and can provide actionable and relevant evidence to strengthen health policy and systems.



Objectives

To build an avenue where the nation's stakeholders' and policymakers' areas of need for quick information pertinent to health systems converges and subsequently processed to provide timely, relevant and impactful output.

4th Health Promotion Conference (2018), IHBR

The 4th HPC was held at Premiera Hotel, Kuala Lumpur. The conference theme was “Sustainable Health Behaviour Change Towards Healthy Nation”. This event was jointly organised with Malaysian Health Promotion Officers Association (MAHEO).

The conference was officiated by YBhg. Dato’ Dr. Chong Chee Kheong, Deputy Director General of Health (Public Health), Ministry of Health (MOH) Malaysia.

The conference consisted of plenary sessions and symposiums focused on Strategies and Health Behaviour in Health Promotion as well as oral and poster presentations. Ministry of Health and Welfare, Taiwan shared experiences on Evidence-based Practice and Health Promoting Hospitals Approach to Improve Healthy Behaviours.

Poster presentation awards as below:

Category	Presenter	Title
Best Practice	Cik Azizam Mohd Ali, Pahang State Health Department	Ilmuan Kecil Celik Kesihatan
	Pn Hazlin Othman, Cawangan Penggunaan Ubat Berkualiti, KKM	Know Your Medicine Ambassadors Programme Implementation in Malaysia
	Dr Wan Nadzirah Wan Pauzi, Klinik Pergigian Hiliran, Kuala Terengganu	A Knowledge, Attitude and Practice (KAP) study of Fissure Sealant use among Dental Therapists and Dental Officer in Kuala Terengganu
Research	Dr Rimah Melati Ab Ghani, Institute for Public Health	Prevalence of Internet Addiction among Malaysian Adolescents
	Pn Masitah Ahmad, Institute for Health Behavioural Research	Ageing Generation: Online Health Seeking Behaviour in Malaysia
	Nor Afiqah Ahmad Nasarulddin, Universiti Sultan Zainal Abidin	Improvement of Health-Related Quality of Life Social Desirability and Religiousness among Drug Addicts of INABAH Programme

2018 National Lean Healthcare Conference

The first National Lean Healthcare conference was held in September 2018 at Kota Bharu with the theme “Everybody Can Lean”. The conference served as a platform for Lean healthcare practitioners to share their knowledge, exchange ideas on applying lean principles and overcoming obstacles successfully at their workplace. Gemba (on-site visits) to Hospital Raja Perempuan Zainab II, KPJ Perdana Specialist Hospital, Hospital Universiti Sains Malaysia and Klinik Kesihatan Bandar Kota Bharu were conducted during this time. These sites were chosen due to their impressive achievement from lean implementation.



UPCOMING EVENTS

INSTITUTE FOR HEALTH MANAGEMENT



Keynote Address

 **Datuk Dr Noor Hisham Abdullah**
Director General of Health, Ministry of Health, Malaysia

2 Plenary Speakers

 **Tan Sri Dato' Seri Dr Jeffrey Cheah Fook Ling**
AO, Founder and Chairman of Sunway Group and Chancellor, Sunway University, Malaysia

 **Datuk Prof Dr Che Muhaya Haji Mohamad**
Motivator, Consultant Eye surgeon and Director of Prof Muhaya Eye & LASIK Center (PMELC), Malaysia

 3rd & 4th July 2019

 Auditorium Perdana
National Institute of Health, Setia Alam,
Selangor

1st TGP INSPIRATIONAL LEADERSHIP SYMPOSIUM 2019

The Building Blocks of Leadership

Co-organized by:
TGP Secretariat Institute for Health Management TGP Cohort 8



Tinjauan Kebangsaan Kesihatan dan Morbiditi 2019

National Health and Morbidity Survey (NHMS) 2019

April - September

iku.gov.my/nhms

  @nhms.iku



Institut Kesihatan Umum (IKU)
Kompleks Institut Kesihatan Negara (NIH)
No. 1, Jalan Setia Murni U13/62
Setia Alam U13, Setia Alam
40170 Shah Alam, Selangor

NHMS Hotline: 03-53620793
Email: nhms.iku@moh.gov.my

HEALTH PROMOTION SCIENTIFIC SYMPOSIUM

"Research to practice: towards sustainable healthy behaviour"

SAVE THE DATE

1 - 2 OCTOBER 2019
TUESDAY - WEDNESDAY

NATIONAL INSTITUTES OF HEALTH (NIH) SETIA ALAM



Organized by
Institute for Health Behavioural Research (IHBR)
Health Education Division
Malaysia Health Promotion Association (MAHEO)

UPCOMING EVENTS

THE 10TH NATIONAL QA CONVENTION 2019
QUALITY-DRIVEN HEALTHCARE:
THE HEART OF UNIVERSAL HEALTH COVERAGE
14-17 OCTOBER 2019
BUKIT GAMBANG RESORT CITY, PAHANG

The National QA Convention was first introduced in 2001 as a reward to health care providers who are actively involved in the implementation of quality assurance/improvement initiatives at their respective workplaces. The convention serves as a platform of sharing success stories and peer-learning process in improving quality of healthcare delivery. Since then, it became a biennial event which is co-organised by the Institute for Health Systems Research, MOH as the National Secretariat for Quality Assurance Programme and a selected state as the host.

This year marks the 10th series of the convention and will be hosted by Pahang Darul Makmur in collaboration with the Malaysian Society for Quality in Health (MSQH) to encourage more participation from the private health sector. Besides QA Project competition as the key agenda, the convention this year will feature many exciting events including plenary sessions and mini symposium by renowned speakers from different background in quality.

We expect more than 100 projects to be presented in the convention and attendance of more than 800 delegates representing multiple professions from public and private health sectors.

General Objective:
 To institutionalise quality improvement activities in the health system

Specific Objectives:

1. To strengthen and expand quality improvement activities among health care workers
2. To serve as an exchange platform for information, knowledge and experience in implementing quality improvement activities
3. To recognise the effort in implementing quality improvement activities
4. To identify potential quality projects to be replicated

Featured Events:

1. Competition of QA Project (Oral and Poster Category)
2. Market Place Poster Showcase
3. Plenary Sessions
4. Mini Symposium
5. Dialogue with DG of Health
6. Award for Tokoh QA Cemerlang
7. Award for Tokoh QA Legenda
8. Short QA Project Video Display

Visit our website at www.ihsr.moh.gov.my for more info.
 Email us at qaconv2019@moh.gov.my for any enquiry



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**MINISTRY OF HEALTH—ACADEMY OF
 MEDICINE MALAYSIA (MOH—AMM)**

**13th MOH-AMM
 Scientific Meeting 2019**
 in conjunction with the 21st NIH Scientific Seminar



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27-29 August 2019
 National Institutes of Health (NIH)
 Setia Alam, Selangor




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