



CRC Seremban Bulletin

Issue 2 | January 2023

*Achieving
Success*
Through Strategic
Goal-Setting





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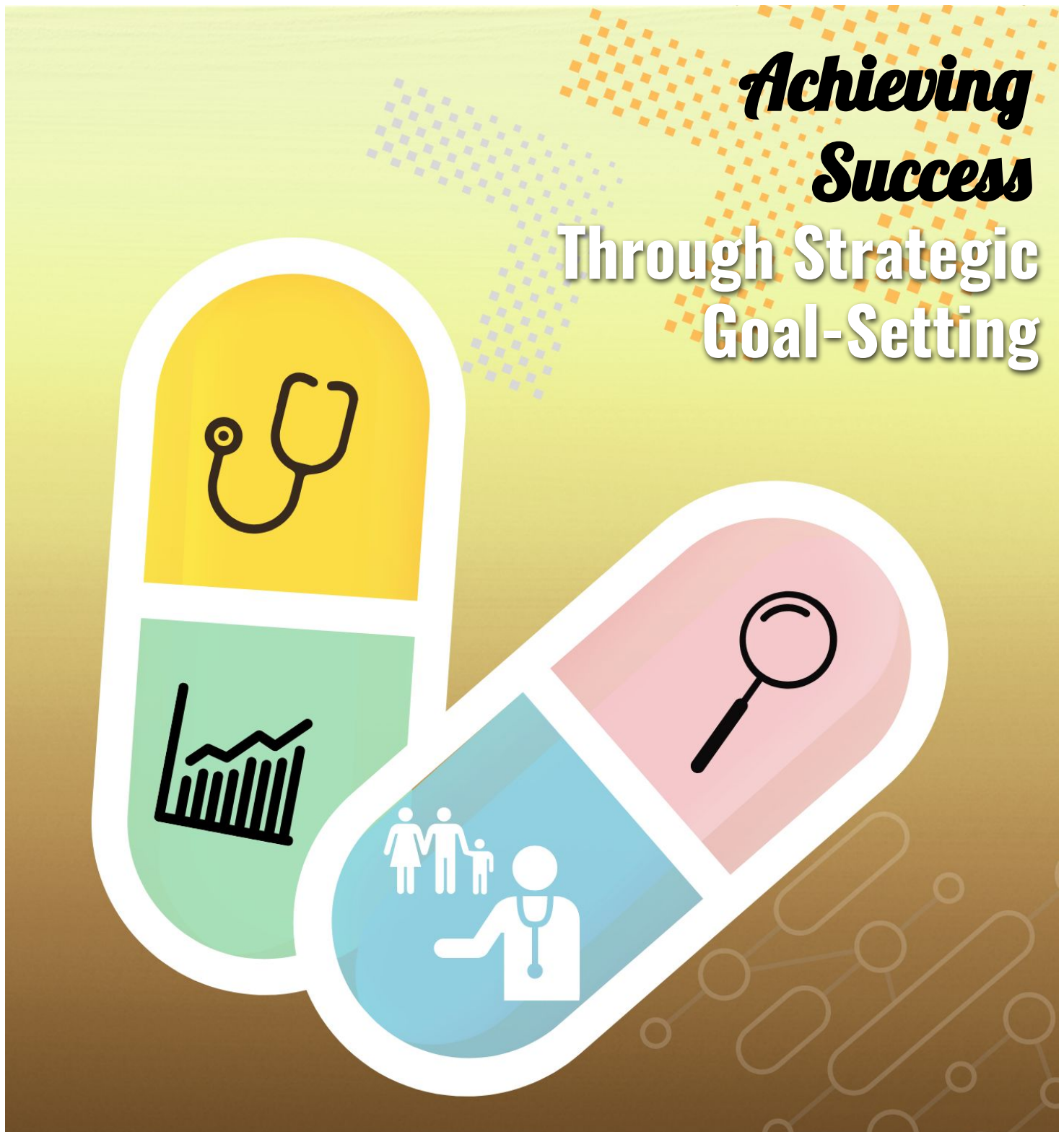




CRC
HOSPITAL TUANKU JA'AFAR SEREMBAN
Research that matters to patients

CRC Seremban Bulletin

Issue 2 | January 2023





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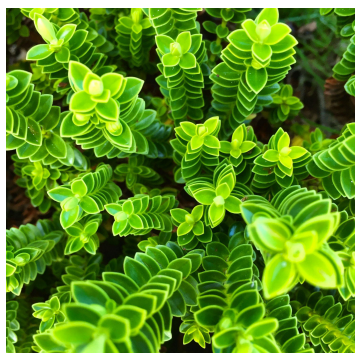
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About Us



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Deputy Head of Unit

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Admin Manager

Dr Zulhijah Binti Abdul Aziz

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Dr Wan Farahiyah Binti Wan Muhmad

Training & Skills Development

Dr Chua Aun Aun

Clinical Research Operation

Dr Gan Li Lian

Hospital Research Review Secretariat

Dr Chua Aun Aun

Dr Zulhijah Binti Abdul Aziz

Clinical Research Centre Hospital Tuanku Ja'afar Seremban (CRC HTJS) was established in September 2006. It is part of the Institute for Clinical Research (ICR) network, under the National Institutes of Health, Ministry of Health Malaysia.

Vision

To become a leading clinical research institution in the region.

Mission

To improve patients' health outcomes through ethical and quality clinical research.

We are committed to support and facilitate research activities, via:

- ❖ provision of database on clinicians interested in research – by interest areas, track record on Industry Sponsored Research (ISR) for Investigator Initiated Research (IIR) and publications;
- ❖ provision of technical, administrative and facility support for clinical research activities;
- ❖ assistance in research protocol registration through NMRR (National Medical Research Register) and application of grants for research;
- ❖ participation in clinical trials and other research initiated or coordinated by the national ICR;
- ❖ capacity building with ongoing training and workshops in research.



From the desk of **CHIEF EDITOR**

A new year brings with it the opportunity to reflect on the past and plan for the future with the expectation that it will be better. We hope to set the stage for this year's research goals by sharing the top health research priorities identified in the 12th Malaysian Plan. Increasing research awareness among healthcare researchers is an ongoing process. We are honoured to introduce the most recent Guidelines for Conducting Research in Ministry of Health Facilities.

We are grateful and excited to feature Dr. Noor Lita Adam and Dr. Wong Kit Chan in the interview sections. We believe that their experiences, from humble beginnings to becoming research leaders in their own right, can serve as motivation for future researchers. As with the previous issue, our newsletter will highlight the work of clinical researchers from the state of Negeri Sembilan in order to promote and recognise their efforts.

On behalf of the editorial staff, I would like to express our gratitude to everyone who contributed to the production of this newsletter. We would like to thank Dr. Zaleha Binti Md Nor, our hospital director, and the hospital management team for their ongoing support of our clinical research activities. Sincere thanks to Dr. Lily Mushahar, the head of unit for CRC HTJS, who is always at the forefront of our continuous growth, and to Dr. Noor Lita Adam, our deputy head of unit, for her optimistic encouragement.

We also extend our appreciation to all the clinicians from Negeri Sembilan who have taken part in our clinical research activities. Thank you for always believing in us and helping us grow.

Dr Gan Li Lian
Clinical Research Centre
Hospital Tuanku Ja'afar Seremban

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Advisors

Dr Lily Binti Mushahar
Dr Noor Lita Binti Adam

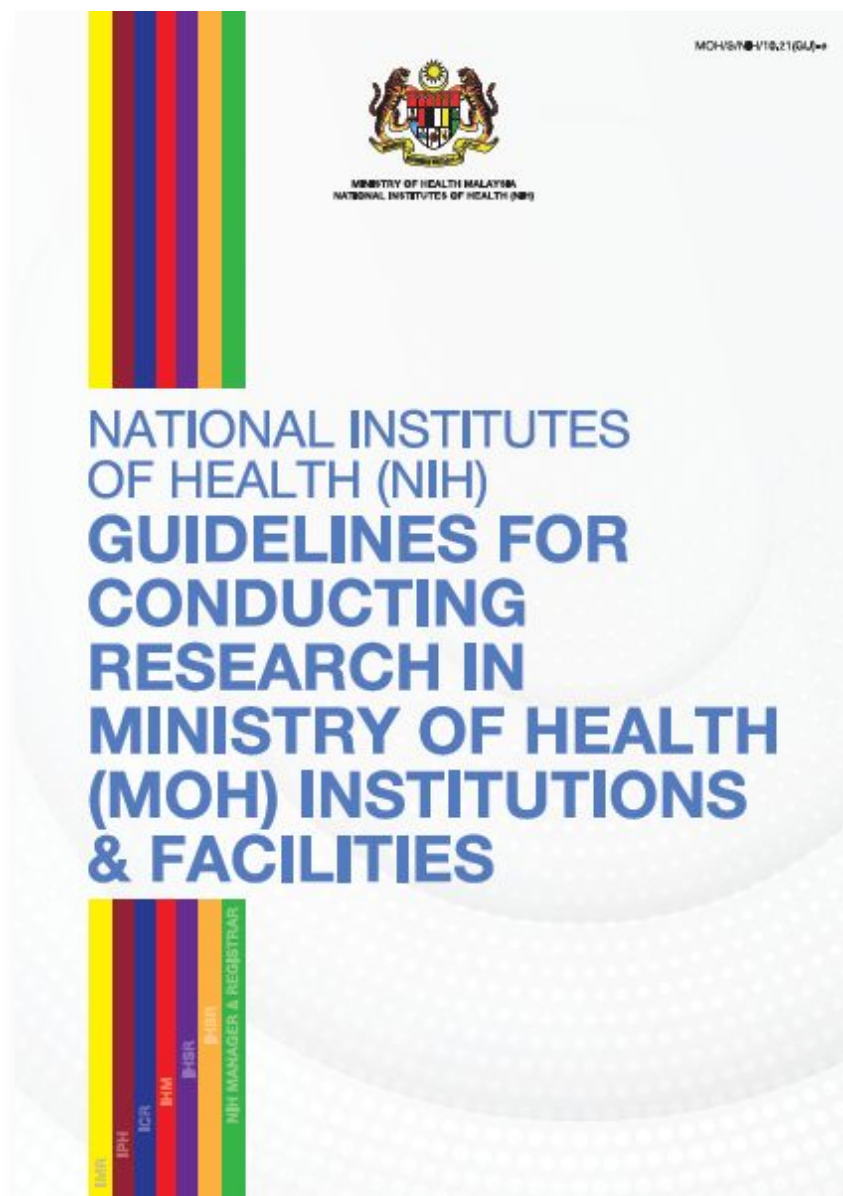
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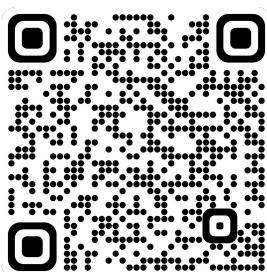
National Institutes of Health (NIH) Guidelines for Conducting Research in Ministry of Health (MOH) Institutions & Facilities, 3rd Edition, 2021.



These updated guidelines consolidate previous guidelines related to the procedures for conducting research in Ministry of Health (MOH) institutions and facilities in a more comprehensive and systematic manner.

Key aspects of the guideline

- Investigation registration on the National Medical Research Register (NMRR)
- Scientific evaluation and ethical approval
- Research grant application
- Scientific dissemination (presentation and publication)



Scan me for quick access!

PDF can be downloaded from:
<https://www.nih.gov.my/publication>
<https://nmrr.gov.my/>

Health Research Priorities

FOR 12TH MALAYSIA PLAN 2021-2025
(12MP-HRP)

**Health
System**

**Mental
Health**

**Non-
Communicable
Diseases**

**Communicable
Diseases**

**Environmental
& Disaster Risks**

Older People

**Nutrition, Food
Safety and
Quality**

Oral Health

Scan here
for more insights!



Turning Setbacks into Success

Rising star in Research

Dr Wong Kit Chan

Consultant Psychiatrist
Hospital Tuanku Ja'afar Seremban



Dr. Wong Kit Chan completed her undergraduate studies at Penang Medical College and the University College of Dublin (UCD), Ireland in 2007. After completing her housemanship at Raja Permaisuri Bainun Hospital in Ipoh, Perak, Dr Wong later served as a medical officer at Hospital Teluk Intan. Following this, she attended Universiti Kebangsaan Malaysia (UKM) for her master's degree, where she spent most of her clinical rotations at Hospital Universiti Kebangsaan Malaysia (HUKM) and Hospital Bahagia Ulu Kinta (HBUK). Dr. Wong completed her postgraduate studies in 2015 and has been working at Hospital Tuanku Ja'afar Seremban (HTJS) as a psychiatrist since then.

Have you always wanted to be a psychiatrist? Any other goals while studying medicine?

I intended to be a paediatrician and spent a year or more working as a medical officer in the paediatrics department at Teluk Intan Hospital. I had every book I needed for the paediatric external exams. After my father passed away unexpectedly, I made the decision to return to Ipoh to be with my mother. Given that I had never considered becoming a psychiatrist, that turn of events was serendipity and a blessing in disguise.

I worked at Hospital Bahagia Ulu Kinta (HBUK) after my transfer. HBUK was my first psychiatry experience outside of medical school since no psychiatric positions existed for housemanship training then. I was fascinated by the substantial recovery that can be achieved by psychiatric patients once they began treatment. Clinically and in terms of their overall quality of life, individuals who were hospitalised improved significantly and quite rapidly. Through my training in psychiatry, I learned that these patients may be helped to return to their normal functioning. Therefore, that piqued my interest, and it spurred me to help more people who are struggling with psychiatric disorders.

Would you share with us your first experience in clinical research?

I conducted my first research as part of the thesis requirement for my Master's degree. It was an investigator-initiated research on the topic of eating disorders among Malaysians. When I first started working at HTJS as a gazetted psychiatrist, my former HOD, Dr. Nor'izam Bt Md Alias, invited me to take part in a clinical trial. The fact that I happened to have a GCP certification on hand at the time was a pure coincidence. My initial exposure to ISR came as a result of an unplanned chance. Surprisingly, given that it was our first research in HTJS, we performed pretty well. I believe we were the second-best recruiter in Malaysia for that research, behind UM. It was a highly satisfying experience, and it also got me deeply interested in research. I realised there was a huge research potential in Malaysia but I never imagined that we'd be able to pull it off in HTJ. When I was a Master's trainee at HBUK, the experts were quite engaged in research. I had always heard of individuals conducting research but had no idea how it was done until I got involved myself.

Who inspired you?

My former head of department, Dr. Nor'izam. She was the one who first introduced me to ISRs. She was also the pioneer who had implemented clinical trials in the psychiatric department of HTJS. Dr. Noormazita, my current HOD, has also been incredibly helpful and encouraging, for which I am extremely thankful. We would not be able to conduct researches at our institution without her strong support.

You have a tight schedule. How do you plan your time to support research-related activities?

Time management is extremely important in ensuring that my commitment to my role as a clinician is not affected while running clinical trials. We often have to work beyond office hours to accommodate the research work. Gaining experience and familiarity with the research process helps too. For instance, using an unfamiliar assessment tool consumes a lot of time. However, gaining experience with the tool helps to build confidence and makes you more efficient with the research workflow. Our investigators worked very well with the study coordinators (SCs) and we have a mutual understanding on how things work here. There are clearly a lot of work behind the scenes, but their competency made the study conduct near effortless.

“Treating patients with novel modalities of treatment and ultimately changing their lives is what keeps me motivated.”

What were the challenges you encountered with ISRs? How did you overcome them?

The main challenge which we faced is a shortage of manpower to conduct research for trials needing multiple assessors; we share spaces with clinics and wards, which can be difficult when the patient load is high. Coordination and planning ahead of time are critical for overcoming these problems. Besides, the unpredictable nature of a psychiatric patient's mental state presents a tough challenge. While we try our level best to explain the informed consent, study designs and procedures to our patients, we always have to be ready for patients' drop outs. We are also cautious in identifying patients who should be excluded from participating in studies. Understanding the natural history of a disease and being mindful of patients' behaviour are critical skills for overcoming this barrier.



The key to a successful project is good teamwork. How do you identify research team members?

Passion and commitment in research are important determinants and fundamentals of a good researcher. Researchers should be driven by the motivation and curiosity to explore on new treatment modalities with the aim of providing the best available care to their patients. These qualities make research work extraordinarily rewarding.

What are your aspirations for the future – especially for the field of clinical research?

My aspiration for the future is that the industry will place more focus in the field of psychiatry in order to develop novel treatment modalities for psychiatric diseases, which ultimately delivers new hope for patients with psychiatric diseases. Mental health well-being is undeniably a critical public health issue, especially in this era of mental health crisis amidst the Covid-19 pandemic. With the increasing awareness of mental health issues, clinical trials in the field of psychiatry should take precedence. Having witnessed the significant positive impact on patients from our previous involvement in clinical trials, I hope that more clinicians will take up the initiative to embark on IIRs and ISRs.

Any words of advice for our budding researchers?

Having passion and commitment in the exploration of novel and best available care for patients will form the driving force of a good researcher. Treating patients with novel modalities of treatment and ultimately changing their lives is what keeps me motivated. Moreover, researchers need to equip themselves with the fundamental knowledge of research skills. Ultimately, clinicians who have no prior experience in clinical trials ought to take a leap of faith and reward themselves with the journey of being in one; a clinical journey which will undoubtedly be immensely fulfilling.

THINGS TO CONSIDER BEFORE STARTING YOUR RESEARCH PROJECT

Does it meet ethical standards?

- Study population - does it involve vulnerable subjects?
- Subject's privacy and data confidentiality
- Informed consent from study subjects
- Any invasive procedures?
- Consider study risk versus benefit
- Conflict of interests?



Is it doable? (feasibility)

- Challenges in study with:
 - Rare exposure / disease
 - Rare outcome event
- Duration of observation / follow-up
- Do you have adequate resources (time, people, budget, infrastructure) to complete study?



Is it scientifically valid?

- Study guided by clear scientific objectives, based on established concepts
- Methods in study designs to avoid research bias
- Can you ensure sound and replicable data?
- How well will the result represent true findings?



Is it beneficial?

- Can the study help solve current problem?
- Will the study result extend knowledge of subject?
- Does the study benefit outweigh the risk / discomfort experienced by the study subjects?





Dr Gan Li Lian

Tips on preparing a Manuscript for Publication

For some researchers, writing a paper for publication is a challenging task. A well-written paper will include a creative introduction, clear and logical data presentation, and a conclusion that reinforces the main topic. In this article, we will give you some pointers on how to write a compelling paper that gets published.

Start writing early.

A complete set of experiment results is not required to begin writing your manuscript. To begin, draft a structure that explains where you intend to lead your reader through your article. You might retain it as a broad outline to help you write. While you are at it, start gathering references and supporting ideas for the next phases of your writing.

In the early stages of writing, you can work on the background/introduction section, which is heavily based on your previous research. Writing the methodology sections while the study protocol is still fresh in your mind will help save time. It may not seem critical to prepare these sections early, but doing so will speed up the writing process.

Create short, simple sentences.

What factors contribute to effective communication? When understanding is a top priority, scholarly articles differ from novels and other non-scientific writings. Short and simple sentences are necessary for effective scientific

communication. Long sentences with fancy words might be confusing to readers and lead to misinterpretations of important scientific findings. Articles in high-impact journals such as *The Lancet*, *Nature*, *Science*, and *Cell* are excellent examples of concise and straightforward writing. While using shorter phrases and paragraphs can help divide information into digestible chunks for the reader, varying your sentences and paragraphs helps prevent them from sounding monotonous.

Coherence and logical flow of text.

Consistent ideas, combined with a logical flow of scientific facts, are critical components of an article's readability. The title, abstract, and keywords are the first three elements of an article.

The main text then follows the IMRAD format, a well-structured framework widely used in most scientific and biomedical journals: introduction, methods, results, and discussion. Following the main text are the acknowledgements, references, and supporting materials.

Aside from that, the inclusion of relevant, coherent keywords all aid in the reader's comprehension. Readers can then draw conclusions and highlight crucial points for future articles. When collaborating with other authors, communication and coordination between preparation, section, and revision are critical to producing a coherent manuscript.

Framework of the IMRAD format:

Introduction: Why was the research conducted? What were the research topics, study objectives, or hypotheses?

Methods: How was the research done?

Results: What was the study's finding? Was the hypothesis true?

Discussion: What is the value of the answers? What is the future direction of research based on your study findings?

Scientific confidence matters.

Planning your study in advance for reproducibility and accessibility is essential as part of good research practices. Journals are increasingly seeking the findings and data that underpin the results provided. Authors who fail to ensure scientific confidence in their work may be subjected to ethical investigations. This might occur during the peer review or post-publication period when errors, research misconduct, or manipulation are suspected.

Hence, a robust system for documenting, storing, and maintaining study data contributes to an objective and evidence-based manuscript, making it solid and easily accessible for readers.

Identify target journals and audiences early on.

Targeting journals and audiences early on is important because it gives you a clear direction for your work. It can also help you choose a targeted message to convey and the appropriate style.

The "Aims and Scope" and "Instructions for Authors" sections of a journal are usually open to the public and can provide you with useful information when deciding on a target journal. After completing your manuscript, it is highly recommended that you redraft and reformat it according to the guidelines of the intended journal.

The majority of biomedical journals adhere to the International Committee of Medical Journal Editors (ICMJE) format recommended by the National Library of Medicine (NLM), while some journals may specify acceptable deviations from the original style. Some journals may require authors to complete checklists for reports of specific study types, depending on the article or research type. For randomised controlled trials, for example, a CONSORT checklist must be uploaded. Authors should therefore check to see if the journal has this requirement and submit it with the manuscript.

A robust system for documenting, storing, and maintaining study data contributes to an objective and evidence-based manuscript, making it solid and easily accessible for readers.

Pre-submission peer review.

After you've finished your manuscript, you can solicit feedback from your colleagues. This extra step before submitting the manuscript has numerous advantages. First, you can identify and select your own panel of subject matter experts to provide constructive feedback on your work. Second, having a peer review your paper objectively may aid in identifying obvious flaws in your manuscript that may result in objections from journal reviewers. Third, the peer review process improves the overall quality of the work. This increases the readability of your manuscript and, as a result, increases your chances of acceptance by journal editors.

Receiving feedback and having to rework sections of a manuscript that you thought was nearly finished can be tough. However, reworking on sections that prompted comment after receiving feedback can improve clarity in your manuscript, even if you don't use the specific changes suggested.

Peer feedback improves the overall quality of your work, increasing the likelihood of acceptance by journal editors.



Photo by John Schnobrich on Unsplash

An effective cover letter matters.

A strong cover letter can pave the way to manuscript acceptance. The cover letter serves as the first impression of your manuscript.

It emphasises the importance of your work while highlighting your key findings from the research. You can also use this opportunity to explain why the manuscript will be of interest to the readers of a journal, which is always on the minds of editors.

As a result, investing effort in producing a comprehensive and persuasive cover letter is important.

Conclusion

Every scientific publication, in essence, shares an idea, and that concept must be unique and coherent. A good manuscript will have content that backs up the idea. It begins with an informative background and ends with a new and citable scientific fact.

Authors that use good writing strategies will create articles that are both impactful and readable. Validated methodology and ethical conduct throughout the research and writing process contribute to the work's scientific credibility.

It is challenging, but not impossible, to get a manuscript published. It requires a lot of practice to become a better writer, so each publication is a golden opportunity for researchers to hone their skills.

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Advancing healthcare through curious leadership

Exemplary role model in research
Dr Noor Lita Adam



Dr. Noor Lita binti Adam is a Consultant Endocrinologist and the current Head of the Department of Medicine at Tuanku Ja'afar Seremban Hospital (HTJS). Dr Noor Lita graduated with a Bachelor of Medicine, Bachelor of Surgery, and Bachelor of Obstetrics from the Royal College of Surgeons in Ireland (RCSI) in 1996. She earned her Masters in Internal Medicine from Universiti Kebangsaan Malaysia (UKM) in 2004. In 2009, she completed her Fellowship in Endocrinology. Dr Noor Lita has extensive experience in clinical research and has numerous publications to her credit. She is currently a council member of the Malaysian Endocrine and Metabolic Society (MEMS). She has also contributed to the development of "Management of Diabetes in Pregnancy" Clinical Practice Guidelines (CPG).

Could you share with us a bit about yourself?

I grew up in Batu Pahat, Johor. After completing primary education, I went to a boarding school until Form 5. Later, I was offered a scholarship from the Public Service Department to study medicine at the Royal College of Surgeons in Ireland (RCSI). I was a shy and quiet undergraduate back then. Fortunately, the international student community was very dynamic and frequently hosted events. There, I met people from all over the world, including Singapore, Thailand, and the Middle East; and we became great friends. Gradually, I worked on my self-confidence and developed my verbal and interpersonal skills.

Would you share with us your early experiences in clinical research?

Writing ophthalmology case report in medical school was my first taste of research. Thereafter, we learnt to present our write-ups. The format of our classes pushed us toward more discussions and oral presentations. Without Powerpoint and gadgets, we made do with overheads projector. Since we could only use a limited number of an overhead slide, the presentation had to be succinct and precise. That was an excellent learning opportunity.

Research was an integral part of my endocrine subspecialty training programme. For my thesis, during the Masters programme, I studied pregnant

women with diabetes using continuous glucose monitoring system. It was considered as a relatively new technology at the time in diabetes population. The study gave us an opportunity to manually analyse blood glucose data for better understanding of glucose variability in diabetic pregnancy. Things have advanced greatly for now with the advancement of flash blood glucose monitoring system. Several factors led to the success of my research during my subspecialty training. We were given plenty of time and opportunities to take part in investigator-initiated research (IIR) and industry-sponsored research (ISR). I involved as a sub-investigator on three to four ISRs and participated in an IIR with other students. With good support, data entry was easier and above all, the high data quality ensures that the study is reliable and robust.

What keeps you motivated in pursuing clinical research?

We have gained valuable experience from our numerous successful collaborations with external trainees and students on research projects. These accomplishments served as tangible proof that I can, in fact, help to bridge the gap between scientific discoveries and real-world clinical practises. Most importantly, being a part of this has shown that I am bringing our patients closer to personalised medicine, which makes me excited to see our endocrine patients receive precise treatment that is tailored to their biological profile. Moreover, researching gives me a break from the seriousness of administrative work, therefore it's a

great source of solace for me. The number of questions a person has, will increase their desire to learn. Having this mindset keeps me excited about the possibility of discovering something new.

Who inspired you?

I had the privilege of working with many researchers during my endocrine training. Most notably, the late Professor Khalid Kadir. He was the first lecturer I got to sit in on in a consultation clinic when I first arrived in campus. He would ask questions like, "What would you do differently for this patient?" or "How can we improve this patient's care?" for each patient we met. Similarly, my immediate supervisor then, Professor Nor Azmi, was also an inspiration to me. Their method helped spark our interest and prompted some self-reflection. Thanks to their teaching, I can now see where each new patient offers an opportunity to assess and refine my practises.

Following that, I worked with Professor Chan Siew Pheng of Universiti Malaya Medical Centre (UMMC). We both shared a desire to improve care for women with diabetes mellitus. It was a blessing to have such dedicated supervisors. I remembered the days when she spent a great deal of time working with me to rehearse the oral presentation before the exit viva.

We have seen incremental growth in the development of clinical services and research-related activities at HTJS. Any insights on this matter?

It took some time for us to develop clinical services and research activities at Hospital Tuanku Ja'afar Seremban. Simultaneously, a rise in the number of subspecialty consultants who are also deeply engaged in ISRs has significantly improved HTJS's reputation. HTJS is now a recognised subspecialty training facility (including endocrine training). Undergraduate and post-graduate students from public and private universities have collaborated with us to do their research here.

Perhaps most notably, our in-house medical officers are becoming increasingly enthusiastic about participating in clinical audits and cross-sectional studies. Some of them were able to take their data from collection through entry and analysis, and then present their findings at local and regional conferences. This is great because it contributes to the process of translating scientific discoveries into clinical practice.

Standing on the shoulders of giants:

Dr Noor Lita and her mentor, the late Professor Dato' Dr. Khalid Kadir.

(Photograph courtesy of Dr Noor Lita)



Do you have any dreams on how the clinical research field should evolve for the benefit of your patients?

I hope that one day patients won't think twice about taking part in research studies since they'll see clinical trials as the norm. Patients have a choice; they may come to us and express interest in participating in research, which is especially helpful for uncommon diseases when the research community is lacking.

As we frequently deal with many endocrine diseases with genetic mutation and have difficulty to confirm it, I do hope our MOH laboratory will be able to expand and develop the genetic services in future. Therefore we do not have to outsource the sample to overseas or private labs.

"... the reality is, even the most promising individual efforts require collaboration to succeed."

Any words of advice for our budding researchers?

It is not necessary to answer difficult research questions when starting your investigation. Audit your clinic, or audit anything that you can readily execute. From there, you may determine what kind of intervention you can provide, which does not necessarily include medicines. It is acceptable to conduct an observational study if no novel therapies are available. There is plenty of good data available that can provide valuable lessons. Above all, you must collaborate with others. When it comes to research, most people believe they can get by without help, but the reality is that even the most promising individual efforts require collaboration to succeed.

Publications

in 2022

(July - December)

Research Title & Authors	Journal (Impact Factor)	Department / Unit of Local Contributing Authors
July - August		
Esophageal squamous cell carcinoma and adenocarcinoma in Malaysia - Pooled data from upper gastrointestinal centers in a multiethnic Asian population <i>Raymond Zhun Ming Lim, Hans Alexander Mahendran; Malaysian Upper Gastrointestinal Surgical Society (MUGIS): Chong Beng Ng, Kuan Yean Low, Sekkapan Thannimalai, Choon Woon Ngo, Nik Ritzal Kosai Nik Mahmood, Reynu Rajan, Mohamad Aznan Shuhaili, Ahmad Sudirman Bin Mohd Salleh, Ramesh A/L K Gurunathan, Azrina Abu Bakar, Mahadevan Deva Tata, Vijaya Shankar Arunachalam, Wan Najmi Bin Wan Daud, Shyang Yee Lim, Kelvin Voon, Mohammad Shukri Jahit, Sze Chee Tee</i>	Cancer epidemiology (2.719)	General Surgery, Hospital Tuanku Ja'afar Seremban
The role of electronic medical records in improving health care quality: A quasi-experimental study <i>Ariff Azfarahim Ibrahim, Mohd 'Ammar Ihsan Ahmad Zamzuri, Rosnah Ismail, Ahmad Husni Ariffin, Aniza Ismail, Muhammad Hazizi Muhammad Hasani, Mohd Rizal Abdul Manaf</i>	Medicine (1.817)	Family Health Development Division, Seremban District Health Office
Mixed messages and the disparity between various levels of care in chronic kidney disease management <i>Jazlan Jamaluddin, Mohd Yusaini Mohd Yusri</i>	Malaysian Family Physician (0.71)	Klinik Kesihatan Seremban
Full blood count values in adolescents and its comparison by gender and ethnicity in Seremban district, Malaysia <i>Afshan Sumera, Esther Rishma Sundram^a, Kwa Siew Kim, Rokiah Khalid^b, Sasikala Devi, Zainab Abd Majeed, Safurah Jaafar</i>	Medical Journal of Malaysia (0.754)	^a Port Dickson District Health Office ^b School Health Unit of Seremban District, Klinik Kesihatan Seremban

Research Title & Authors	Journal (Impact Factor)	Department / Unit of Local Contributing Authors
Compliance to Infection Prevention and Control Practices Among Healthcare Workers During COVID-19 Pandemic in Malaysia <i>Nadia Mohamad, Muhammad Alfatih Pahrol, Rafiza Shaharudin, Nik Khairul Reza Md Yazin, Yelmizaitun Osman, Haidar Rizal Toha, Normazura Mustapa, <u>Zuraida Mohamed</u>, <u>Azyyati Mohammad</u>, Rohaida Ismail</i>	Frontiers in Public Health (6.461)	Occupational and Environmental Health Unit, Negeri Sembilan State Health Department
Histone Deacetylase Inhibitors Restore Cancer Cell Sensitivity towards T Lymphocytes Mediated Cytotoxicity in Pancreatic Cancer <i>Chin-King Looi, <u>Li-Lian Gan</u>, Wynne Sim, Ling-Wei Hii, Felicia Fei-Lei Chung, Chee-Onn Leong, Wei-Meng Lim, Chun-Wai Mai</i>	Cancers (6.319)	Clinical Research Centre, Hospital Tuanku Ja'afar Seremban
Genetic variations in methotrexate metabolic pathway genes influence methotrexate responses in rheumatoid arthritis patients in Malaysia <i>Hong Xi Sha, Kumar Veerapen, Sook Khuan Chow, <u>Suk Chyn Gun</u>, Ing Soo Lau, Renee Lay Hong Lim, Zaliha Zulkifli, Yoon-Yen Yow, Suat Cheng Peh, Jung Shan Hwang</i>	Scientific Reports (4.543)	Internal Medicine Department, Hospital Tuanku Ja'afar Seremban
Effectiveness of a complex, pre-conception intervention to reduce the risk of diabetes by reducing adiposity in young adults in Malaysia: The Jom Mama project - A randomised controlled trial <i>Ainul NM Hanafiah, Jens Aagaard-Hansen, Julius CH Cheah, Shane A Norris, Zulkarnain BA Karim, Jutta KH Skau, <u>Zainudin M Ali</u>, Regien Biesma, Priya Matzen, Lokman H Sulaiman, Mark Hanson</i>	Journal of Global Health (4.182)	Negeri Sembilan State Health Department
Iatrogenic hypoglossal nerve palsy, a rare complication post suspension laryngoscopy <i>Johannas Mohd Yusof, <u>Khairul Azlan S Abu Dahari</u>, <u>Narindev Kaur</u>, Mawaddah Azman</i>	Journal of Taibah University Medical Sciences (2.402)	Otorhinolaryngology Department, Hospital Tuanku Ja'afar Seremban

Research Title & Authors	Journal (Impact Factor)	Department / Unit of Local Contributing Authors
September – October		
2021 Asia-Pacific Graves' Disease Consortium Survey of Clinical Practice Patterns in the Management of Graves' Disease <i>Rajeev Parameswaran[#], Mechteld Christine de Jong, James Lee Wai Kit, Kathleen Sek, Tran Quang Nam, Tran Viet Thang, Nguyen Thy Khue, Than Than Aye, Phone Myint Tun, Timothy Cole, Julie A Miller, Michael Villa, Benjapa Khiewvan, Sirinart Sirinvaravong, <u>Yong Lit Sin</u>, Rohaizak Muhammad, Tjin Shing Jap, Amit Agrawal, Rajesh Rajput, Ranil Fernando, Manilka Sumanatilleke, Ketut Suastika, Young Kee Shong, Brian Lang, Luigi Bartalena, Samantha Peiling Yang[#]; Asian Graves Consortium Study</i> [#] Contributed equally	Endocrine (3.946)	Internal Medicine Department, Hospital Tuanku Ja'afar Seremban
Analgesic efficacy of the superficial versus deep serratus plane blocks for mastectomy with axillary clearance: A randomized controlled trial <i><u>Kok Wang Tan</u>, Syarifah Noor Nazihah Sayed Masri, Qurratu Aini Musthafa, Azrin Mohd Azidin, Amiruddin Nik Mohamed Kamil, Azarinah Izaham, Nadia Md Nor</i>	Medicine (1.817)	Department of Anaesthesiology & Intensive Care, Hospital Tuanku Jaafar Seremban
A Malay Version of the Attitude to Ageing Questionnaire: Its Adaptation, Validation, and Reliability in the Malaysian Older Adult Population <i><u>Nazihah Rejab</u>, Noor Azimah Muhammad, Hizlinda Tohid, Noorlaili Mohd Tohit, Pok Wen Kin, Ismail Drahman</i>	Annals of Geriatric Medicine and Research (2.696)	Klinik Kesihatan Seremban
Occupational Injury Risk Mitigation: Machine Learning Approach and Feature Optimization for Smart Workplace Surveillance <i>Mohamed Zul Fadhli Khairuddin, Puat Lu Hui, Khairunnisa Hasikin, Nasrul Anuar Abd Razak, Khin Wee Lai, Ahmad Shakir Mohd Saudi, <u>Siti Salwa Ibrahim</u></i>	International Journal of Environmental Research and Public Health (4.536)	Negeri Sembilan State Health Department
Perceived Risk for Dengue Infection Mediates the Relationship between Attitude and Practice for Dengue Prevention: A Study in Seremban, Malaysia <i><u>Mohd 'Ammar Ihsan Ahmad Zamzuri</u>, Farah Nabila Abd Majid, Rahmat Dapari, Mohd Rohaizat Hassan, Abd Majid Mohd Isa</i>	International Journal of Environmental Research and Public Health (4.536)	Seremban District Health Office

Research Title & Authors	Journal (Impact Factor)	Department / Unit of Local Contributing Authors
Health-related quality of life amongst children with chronic kidney disease in Malaysia: performance of the Bahasa Melayu version of the PedsQL 3.0 ESRD Module (PedsQL 3.0 VerBATIM: version in Bahasa Melayu. Translated for use in Malaysia) <i>Kamila Abu Bakar[#], Nor Asiah Muhamad[#], Mohamad Alwi Sarpin, <u>Syaniza Shaharudin</u>, Sangeet Sidhu, Suet Li Yap, Tengku Hasnita Tengku Hussain, Hai Liang Tan, Fen Ni Ong, Wen Chian Gan, Mohammad Ikram Ilias, Juliana Othman, <u>Caroline Siew Yin Eng</u></i> [#] Contributed equally	Pediatric Nephrology (2.524)	Paediatric Department, Hospital Tuanku Ja'afar, Seremban
November - December		
Evaluating the Optimal Operating Table Height for ProSeal-LMA™ Insertion <i><u>Song Lin Low</u>, Azlina Masdar, Nadia Md Nor, Azrin Mohd Azidin, Hsueh Jing Low, Siti Nidzwani Mohamad Mahdi</i>	International Journal of Clinical Practice (2.509)	Department of Anaesthesiology and Intensive Care, Hospital Tuanku Ja'afar Seremban
Application of WALANT in Diaphyseal Plating of Forearm Fractures: An Observational Study <i>Hui Meng How, <u>Brandon Liu Juan Khoo</u>, Mohd Adham Shah Ayeop, <u>Abdul Rauf Ahmad</u>, <u>Norhaslinda Bahaudin</u>, Amir Adham Ahmad</i>	Journal of Hand Surgery Global Online (0.568)	Department of Orthopaedics, Hospital Tuanku Ja'afar, Ministry of Health, Seremban

**“Everything is
theoretically
impossible, until it is
done.”**

- Robert A. Heinlein

CRC Activities

in 2022

(July - December)

Bengkel NIH Roadshow, 22nd August



Good Clinical Practice (GCP) Workshop, 6-8th September



CRM Trial Connect 2022, 14-15th October



15th National Conference for Clinical Research (NCCR), 18-20th October



Nursing Research Workshop, 7th December



CRC HTJS Year End Training Workshop, 16th December



“Great things are done by a series of small things brought together.”

- Vincent Van Gogh

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HOSPITAL TUANKU JA'AFAR SEREMBAN

Research that matters to patients

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