

pulse@UM

- ◆ Child victimisation: The outcome of abusive head trauma
- ◆ Universiti Malaya Medical Marijuana Research Consortium (UM-MMRC): The future of medical marijuana research in Malaysia
- ◆ Protecting older people in the community: Role of primary healthcare service providers
- ◆ Palliative care for children: Leave no child behind
- ◆ Advocating for the health of migrants during the pandemic



Human Rights & Health Equity

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FOREWORD FROM THE DEPUTY DEAN OF RESEARCH

Greetings to all!

The Faculty of Medicine has had a fruitful 2021 despite the challenges posed by the pandemic. We ranked 65 in the Quacquarelli Symonds (QS)-World University Rankings 2022 and 8th in the QS-Asia University Rankings. We are proud of our staff and students who made these accomplishments possible. Thank you!!

This third issue of Pulse@UM for the year 2021 aligns with the Faculty's strategic plan for 2021–2025 for research to have a tangible impact on society. The cover stories featured experts in the Human Rights and Health Equity, including Prof. Dr. Mary Joseph Marrent on Child Victimization, Dr. Chong Lee Ai on Leaving no child behind for palliative care, Dr. Fadzilah Hanum and the team on Elder abuse and neglect and Dr. Tharani Loganathan on Migrant rights. Following the recent highlight on cannabis-based products for medical uses, Dr. Sharifah Zamiah and the Universiti Malaya Medical Marijuana Research Consortium (UM-MMRC) are leading in conducting fundamental research to unravel potential applications of marijuana.

COVID-19 infection harms the community's health, and symptoms may last even after recovery. In this bulletin, Prof. Dr. Moy Foong Ming presented the research findings on COVID-19 survivors' long-term effects and recovery (Long COVID). This bulletin also highlights Prof. Dr. Goh Khean Jin's inaugural lecture and the thrilling week-long Research e-Carnival at the

Faculty of Medicine in October. A BIG Thank You to all those who made the virtual research carnival a success.

The Chancellor of Universiti Malaya inaugurated the Dato' Panglima Kinta Eusoff Research Centre (DPKERC) on 13th December 2021. This Centre will promote common space areas that may encourage more multidisciplinary medical research via innovation and collaboration.

As the final issue of 2021, we also summarise the Faculty's achievement in grants and publications. We would also like to thank all the academic staff who retired in 2021 for their tremendous contributions over the years. We value their time and effort, and they have been excellent faculty assets during their tenure.

This publication results from the dedication and hard work of the Contributors and the excellent Editorial team. Thank you! You all have contributed to another successful issue.

Enjoy reading this issue of the Pulse@UM



Prof. Dr. Sanjay Rampal
Lekhraj Rampal

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Child Victimisation: The outcome of abusive head trauma

Abusive head trauma (AHT), previously known as shaken baby syndrome, is a serious form of physical abuse affecting children under 5 years of age. It is a leading cause of fatality due to physical abuse and the most common form of traumatic brain injury in infants under 1 year of age.

Survivors of AHT are at risk of long-term disability, developmental delay and epilepsy following injuries to the brain and associated retinal haemorrhages. Most studies on outcome have emerged from high-income western nations, with a

paucity of information from low and middle-income countries. Although AHT in Malaysia has been documented since the 1990s, there was previously no information regarding long-term outcome. To address this gap, Dr Ang Siew Chen, a clinical Masters student, was supervised in a study on the outcome of AHT in children seen by the UMMC SCAN (Suspected Child Abuse and Neglect) team. The continuity of care and inter-disciplinary cooperation between clinical teams at UMMC made this study possible.

The findings of this recently published study are disturbing. Of these children, there was an overall mortality of 10%, at least 35% were disabled and 29% had multiple disabilities. Children who had been followed up until at least 5 years of age had a higher proportion of disabilities, of which cognitive impairment was the most prominent. These outcomes have serious implications with regard to rehabilitation, educational support and long-term care. More than three-quarters of these children had suffered AHT when they were six months or younger. Similar to two previous Malaysian studies, the majority of cases occurred in care environments outside their homes such as the homes of babysitters or nurseries. This is in striking contrast to reports from high income countries in the West where this usually occurs at home in the care of parents or their partners.

The Department of Paediatrics collaborated with the Malaysian Paediatric Association in hosting a series of two webinars on AHT in October 2021 to update the local paediatric community on this serious problem and to present findings of our research. It is hoped that this will stimulate further research on the local incidence and cost implications of AHT. Local research on AHT is a vital

component of advocacy to prevent this tragedy. Data is needed to increase the visibility of this problem as well as to devise prevention policies and programmes which protect the rights of children within the Malaysian context. ■



Mary Joseph Marrett
Department of Paediatrics

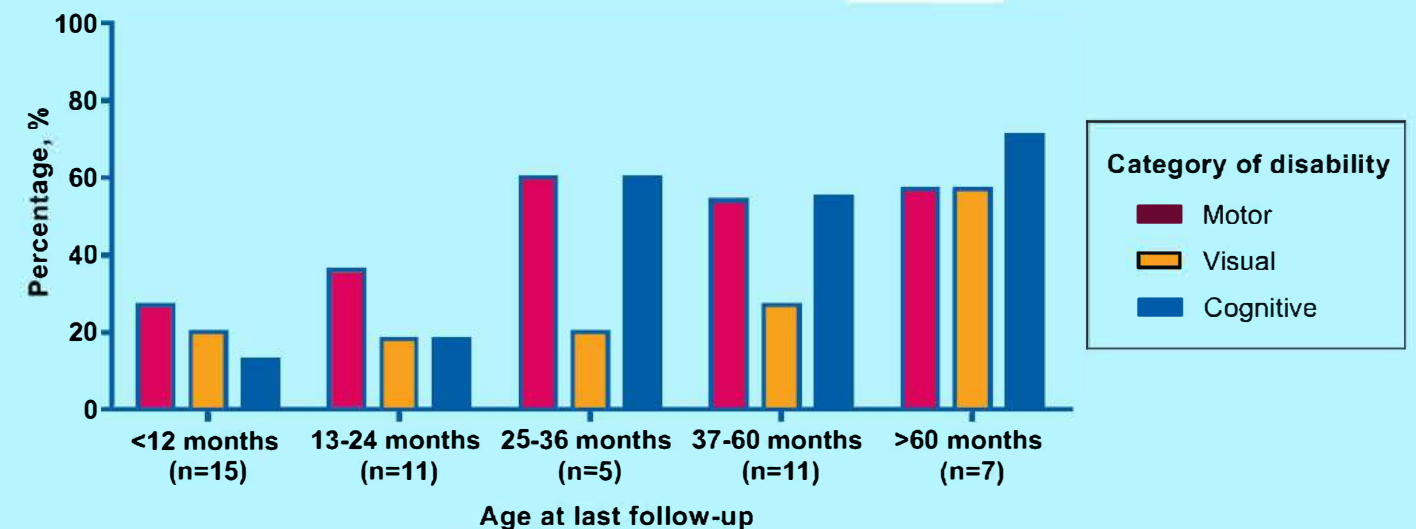


Figure 1: Disability in survivors of abusive head trauma (AHT) seen at UMMC



Figure 2: Speakers and hosts at our first webinar in the series on Saturday 2 October 2021

1. Cheah IG, Kasim MS, Shafie HM, Khoo TH. Intracranial haemorrhage and child abuse. *Ann Trop Paediatr.* 1994;14(4):325-8. doi: 10.1080/02724936.1994.11747737. PMID: 7880096.
2. Ang SC, Marret MJ, Jayanath S, Khoo WV, Takwir MFM. Outcome of abusive head trauma in children less than 2 years: A single center study from a middle-income country. *Child Abuse Negl.* 2021 Oct;120:105187. doi: 10.1016/j.chiabu.2021.105187. Epub 2021 Jul 1. PMID: 34218125.

Universiti Malaya Medical Marijuana Research Consortium (UM-MMRC):

The future of medical

Marijuana research in Malaysia



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The establishment of the Universiti Malaya Medical Marijuana Research Consortium (UM-MMRC) was paved by a recent statement of the Minister of Health, Khairy Jamaluddin.

Consequently, a group comprising of scientists and clinicians of diverse expertise was formed to work hand-in-hand to advance evidence-based research on the effectiveness and safety of medical

marijuana in therapeutic applications. The UM-MMRC aims to deliver a balanced perspective on the medical application of marijuana and the adverse effect of non-medical or recreational use.

Clinicians, medical academics and experts have long been aware of the potential benefits of medical marijuana. However, due to the legislative restrictions, lacklustre support and interest in

marijuana related-research has been almost non-existent. Malaysia is currently far behind in the development of this potential research and therapeutic based subject, which has far-reaching economic healthcare benefits. Understandably, this is largely due to the misinformed reputation of marijuana as a recreational and addictive substance. The UM-MMRC intends to research this subject in great detail and attempt to progress alongside our ASEAN neighbours.

It is no secret that illegal transaction of both therapeutic (cannabinoid oil) and recreational marijuana is in existence all across South East Asia despite strict legal laws and enforcement even to the extent of capital punishment in these countries. Such laws only increase contraband distribution that escapes tax implementation and this causes billions of dollars lost in collectable income for these countries. Along with this, there is a complete lack of regulatory and surveillance by national-based pharmaceutical agencies and this could lead to a high level of misuse.

We aim for UM to be the first medical marijuana research hub in Malaysia, working alongside the government and pharmaceutical industry to educate our nation on the use of medical marijuana and the harm of abuse. Not only this strategy would promote advancement in research relating to marijuana in Malaysia, this would also equip our nation to join the expanding global medical marijuana market that is estimated to reach USD 70.6 billion in 2028 with an annual compound annual growth rate (CAGR) of 26.7% (1).

Thailand (2) and Singapore (3,4) have begun funding medical marijuana research and have approved the use of medical marijuana for treatment-resistant conditions such as Dravet syndrome, Lennox-Gastaut syndrome, patients on palliative care and pain management for rheumatoid arthritis patients. UM-MMRC will take the lead by fostering fundamental research to unravel other potential applications of medical marijuana, promoting a better understanding of the benefits and risks. The UM-MMRC research cluster will apply the scientific and medical findings by conducting clinical trials on our patients, in control and closely monitored settings.

This would enable UM to begin the process of designing therapeutics based on medical marijuana of the highest grade for multiple applications in medicine, both as research and commercial use, acquiring patents and creating a revolution in health economics that could challenge the market monopoly by giant multinational pharmaceutical industries. Last but not least, it will enable us to truly live up to our tagline, “UM Research: Transforming Knowledge, Industries and Lives”.

1. Legal Marijuana Market Size Worth \$70.6 Billion By 2028. Available at: <https://www.grandviewresearch.com/press-release/global-legal-marijuana-market>. (Accessed: 25th November 2021)

2. Zinboonyahoon, N., Srisuma, S., Limsawart, W., Rice, A. S. C. & Suthisisang, C. Medicinal cannabis in Thailand: 1-year experience after legalization. *Pain* 162, S105-S109 (2021).

3. Girl with epilepsy in S'pore first & only one receiving cannabis-based drug approved for treatment here - Mothership.SG - News from Singapore, Asia and around the world. Available at: <https://mothership.sg/2019/12/singapore-cannabis-drug-epilepsy-treatment/>. (Accessed: 25th November 2021)

4. Second young epilepsy patient in S'pore gets nod to use medical cannabis, Singapore News & Top Stories - The Straits Times. Available at: <https://www.straitstimes.com/singapore/second-young-epilepsy-patient-in-spor-e-gets-nod-to-use-medical-cannabis>. (Accessed: 25th November 2021)

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Palliative Care for Children: Leave No Child Behind

The 2021 World Hospice and Palliative Care Day's theme - 'Leave No One Behind-Equity in Access to Palliative Care' resonates strongly with all of us caring for children with palliative care needs. There are about 4 million children in the world who need palliative care and the majority live in low- or middle-income countries with little or no access to such care (1). Babies, children and adolescents with incurable and serious illnesses depend on healthcare providers to advocate for them. However, their needs are often overlooked especially when palliative care is misrepresented.

WHO defines palliative care as a holistic approach that starts at diagnosis and continues whether or not the child is able to receive treatment directed at the disease. It aims to improve quality of life through the prevention and relief of suffering. Thus, healthcare providers need to be able to assess and alleviate physical symptoms, as well as the often less-addressed psychosocial and spiritual distress throughout the illness journey. A patient-focused approach adopted by palliative care teams will be able to help children and parents make informed choices, especially when treatments or interventions are adding to their suffering.

The United Nations Conventions on the Rights of the Child (Article 24) states clearly that children have rights to the highest attainable standard of health and access to such services (2). The World Health Assembly Resolution for Palliative Care (2014) calls on all member countries to strengthen and integrate palliative care in their healthcare systems and to ensure equitable access (3). This is further highlighted by the United Nations Sustainable Development Goals (2015) in the roadmap to Good Health and Well Being for all, underscoring Universal Health Coverage (1).

To ensure equitable access to palliative care, we need to collectively implement these contracts and assert these rights to ensure all children live well, to their greatest potential for as long as possible, and die with their wishes fulfilled with dignity.■



Chong Lee Ai
Department of Paediatrics



Palliative care, attends to family's goals of care

"After about 6 weeks in hospital, his parents chose to be reunited with the rest of his family at home and he was surrounded by loved ones at the end of his life."

Palliative care, provides family-centred care and supports families psychologically and spiritually.

"There are so many times when we need him more than he needs us. He has no clue what he truly does for our soul." - Mother of a 7-year-old.



1. Connor, Stephen & Morris, Claire & Brennan, Frank. (2020). Global Atlas of Palliative Care, 2nd Edition.
2. Convention on the Rights of the Child. <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx> (accessed 31 October 2021)
3. Strengthening of palliative care as a component of comprehensive care throughout the life course. https://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_R19-en.pdf (accessed 31 October 2021)

ADVOCATING FOR THE HEALTH OF MIGRANTS DURING THE PANDEMIC

Malaysia is among the top destination countries for international migrants in the ASEAN region. According to the Department of Statistics, documented non-citizens number 3.2 million in 2019 or 10% of the total population in Malaysia [1]. Most non-citizens in the country are low-wage migrant workers, of which both documented and undocumented are estimated at 4.2 to 6.2 million people [2]. Also, more than 178,000 refugees and asylum-seekers were registered with the UNHCR in Malaysia in 2021 [3]. Refugees, asylum-seekers and both documented and undocumented migrant workers can be classified as vulnerable migrants, as they face significant hardships and are prone to abuse and exploitation. Health is among the affected human rights, as vulnerable migrants face challenges in maintaining health at destination countries due to their poor living and working conditions and multiple barriers in accessing quality health services [4].

During the COVID-19 pandemic, the health challenges faced by migrant communities were further exacerbated by nationwide restrictions including the closure of international borders and restrictions in travel and social gathering, closures of non-essential industries and others. A series of immigration raids conducted during the height of the pandemic, resulted in the arrest and detention of undocumented migrants including refugees and asylum-seekers [5]. The subsequent overcrowding at immigration detention centres may have triggered COVID-19 clusters among undocumented migrant workers in detention [6, 7].

Immigration raids of areas under strict lockdown (EMCO) sent the wrong message that healthcare was linked with immigration enforcement activities. The over-securitisation of healthcare was a real concern during a pandemic, as it did not engender trust in public health measures.

The public discourse referring to the migrant population with regards to increasing COVID-19 transmission, further marginalised and discouraged migrants from seeking healthcare.

Public health measures work at a population level, and we need the cooperation of all parties for disease prevention and containment measures to be effective. It is counterproductive to blame migrants for bringing disease and exclude people from essential healthcare based on citizenship or ability to pay.

As such, it is imperative that I share our team's research on healthcare financing and social protection policies to change the public narrative and influence positive policy change towards health. Therefore, I participated in media interviews (print, radio, and television) as well as public forums and webinars. Also, more importantly I engaged with the undergraduate medical students and postgraduate students on migrant health. Academic advocacy is important not for personal glory, but for the greater good.■



Tharani Loganathan
Department of Social and Preventive Medicine



Figure 1 and 2: Interview sessions conducted by Astro Awani

1. Current Population Estimates by age and ethnic group, Sabah [Internet]. 2021 [cited 2021 Sep 15]. Available from: <http://pqj.stats.gov.my/searchBI.php?tahun=2021&kodData=2&kodJadual=1&kodCiri=5&kodNegeri=12>.
 2. Counting Migrant Workers in Malaysia: A Needlessly Persisting Conundrum [Internet]. ISEAS – Yusof Ishak Institute. 2018. Available from: <https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/item/7354-201825-counting-migrant-workers-in-malaysia-a-needlessly-persisting-conundrum>.
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 6. CodeBlue. MOH Reports 270 Covid-19 Cases At Immigration Detention Depot 2020. Available from: <https://codeblue.galencentre.org/2020/06/04/moh-reports-270-covid-19-cases-at-immigration-detention-depot/>.
 7. Vivienne Chew. Covid-19 Outbreaks in Malaysia's Detention Centres. 2020 June 26, 2020. Report No.
- Note: Dr Tharani Loganathan was awarded a research grant entitled 'Policy gaps in protecting the health of migrant workers in Malaysia and China and returnees in Myanmar'. This study was funded by the China Medical Board.

Background vector adapted from freepik (www.freepik.com)

Older people with their vast experience and wisdom, are precious assets in our society. Despite this, the effort to safeguard older people may not be well established. By the year 2030, 15% of the Malaysian population will be 60 years old and above. This would mean an increase in the dependency ratio for the country with the possibility of health and social issues such as elder abuse and neglect (EAN) being magnified.

EAN is associated with immediate and long-term adverse health, social and economic concerns. It leads to a higher risk of premature mortality due to physical injuries and psychological disabilities.

Those affected suffer from poor quality of life and lesser life satisfaction as they lose their autonomy and ability to make decisions. EAN also increases the possibility of older people to suffer from pain, face humiliation, experience loneliness and reducing self-confidence. Family members and communities are also affected through loss of trust, dysfunctional family institutions, loss of respect and cultural values, undermining social norms, and breakdown of the harmonious community relationship. From the economic perspective, EAN increases the health care cost and social welfare services utilisation, as well as the cost due to loss of human resources.

PROTECTING OLDER PEOPLE IN THE COMMUNITY: ROLE OF PRIMARY HEALTHCARE SERVICE PROVIDERS

Therefore, how do we prevent EAN from happening? Caregivers' positive coping skills, a sense of familism, and perceiving the relationship with older people as gratifying are some of the factors believed to prevent EAN. Others include the older people's help-seeking behaviour and resilience as well as the presence of social support and availability of resources in the community. Preventive measures and interventions offered by healthcare service providers have also been proven to reduce the occurrence and impact of EAN. Specific laws and services to protect older people have been implemented in certain countries.

EAN preventive efforts in Malaysia including funding, policy, research, education, and training are still lacking. Hence, the PEACE®, Universiti Malaya has initiated strategies for intervention in EAN based on the multidisciplinary team approach. One of the strategies is to strengthen the intervention skills of the primary care providers of EAN. The primary care setting and its principles (comprehensive, continuity of care, coordination of care, preventive and family involvement) make it ideal to provide the different levels of EAN prevention and intervention. Malaysian primary healthcare service providers acknowledged their roles and strengths as well as the great opportunities to prevent and intervene in EAN in the community. However, they faced multilevel challenges at the individual, interpersonal, community, organisational and policy levels (Figure 1) [1, 2].

Within PEACE®, a clinical guideline on EAN intervention and EAN training programme was developed suitable for the local scenario and sensitivity. [3, 4]. These interventions have been tested collaboratively with the Ministry of Health counterparts and proven to bring benefits with the approaches taken at the primary care level [5, 6]. In addition, findings for PEACE® has pushed for a specific legal intervention to be drafted in Malaysia.

EAN is a type of family violence and its intervention is complex. Considering the lack of evidence-based practice in this area, a collaborative effort among country members of the World Family Doctor Organization (WONCA): Special Interest

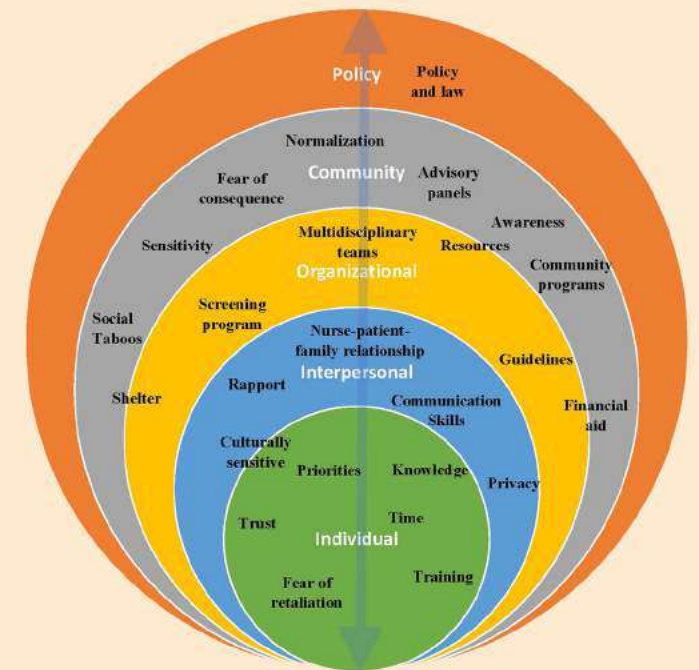


Figure 1: Challenges to prevent & intervene EAN

Group in Family Violence is ongoing to come up with a standard framework for intervention in family violence at the primary care setting. As we acknowledge the burden of EAN onto older people, service providers and the economy, let us not forget to play our part in preventing ourselves and people close to us to suffer from EAN.■



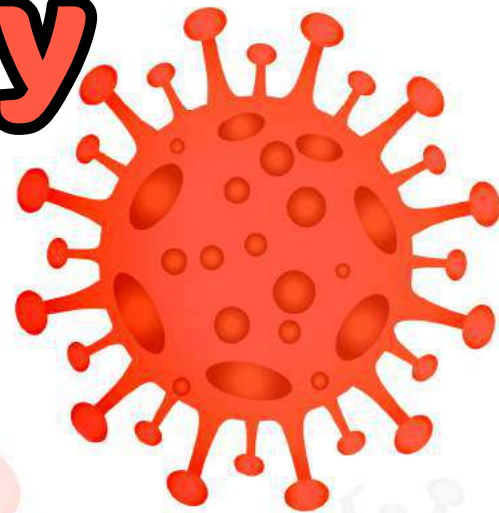
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1. Mohd Mydin FH, Othman S. Elder Abuse and Neglect Intervention in the Clinical Setting: Perceptions and Barriers Faced by Primary Care Physicians in Malaysia. *Journal of Interpersonal Violence*. 2020;35(23-24):6041-65.
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4. Mohd Mydin FH, Othman S, Choo WY, Mohd Hairi NN, Mohd Hairi F. Manual Facilitator: Pengendalian Kes Penderaan dan Pengabaian Warga Emas di Peringkat Primer (Manual for Facilitator: Management of Elder Abuse and Neglect in Primary Care). 2 ed. Kuala Lumpur: Department of Primary Care, Faculty of Medicine, Universiti Malaya; 2020.
5. Mohd Mydin FH, Choo WY, Othman S, Mohd Hairi NN, Mohd Hairi F, Ali Z, et al. Evaluating the Effectiveness of I-NEED Program: Improving Nurses' Detection and Management of Elder Abuse and Neglect-A 6-Month Prospective Study. *J Interpers Violence*. 2022;37(1-2):NP719-NP41.
6. Mohd Mydin FH, Othman S, Choo WY, Mohd Hairi NN, Mohd Hairi F, Syed Karim SN, et al. Supporting family doctors to address elder abuse: a quasi-experimental study in Malaysia. *Journal of Elder Abuse & Neglect*. 2021;1-17.

Long COVID among COVID-19 survivors in the community



The research team from the COVID-19 Long-term Effects And Recovery (CLEAR) study conducted an online survey on Long COVID among the COVID-19 survivors in the community from July to September 2020. A webinar on Long COVID (link: <https://fb.watch/8VN1sYXetP/>) was also conducted on 18 September 2021.

From the preliminary results among 525 respondents, 46.7% of them experienced post-COVID symptoms up to 12 weeks and 20.6% experienced the symptoms for more than 3 months (Long COVID). Among the respondents, the most commonly reported symptoms for Long COVID were tiredness, feeling anxious and depressed, brain fog and insomnia.

We did not find any trend in Long COVID among age groups. Although there was a trend in gender where females (22.3%) were more likely to experience Long COVID compared to males (18.1%), the findings were not significant.

Long COVID was significantly associated with the severity of acute COVID-19. A high proportion of the respondents who suffered Long COVID are those in the severe category (31.3%), followed by moderate (28.8%), mild (17.2%) and those with no symptoms (7.8%). These findings showed that even patients without symptoms may experience Long COVID conditions.

About one third of our respondents perceived that they were currently not in good health compared to before COVID-19 infection. Another one third of them complained that these symptoms affected their work productivity where they had to reduce their work hours (64.3%) or take leave (30.8%) from work.

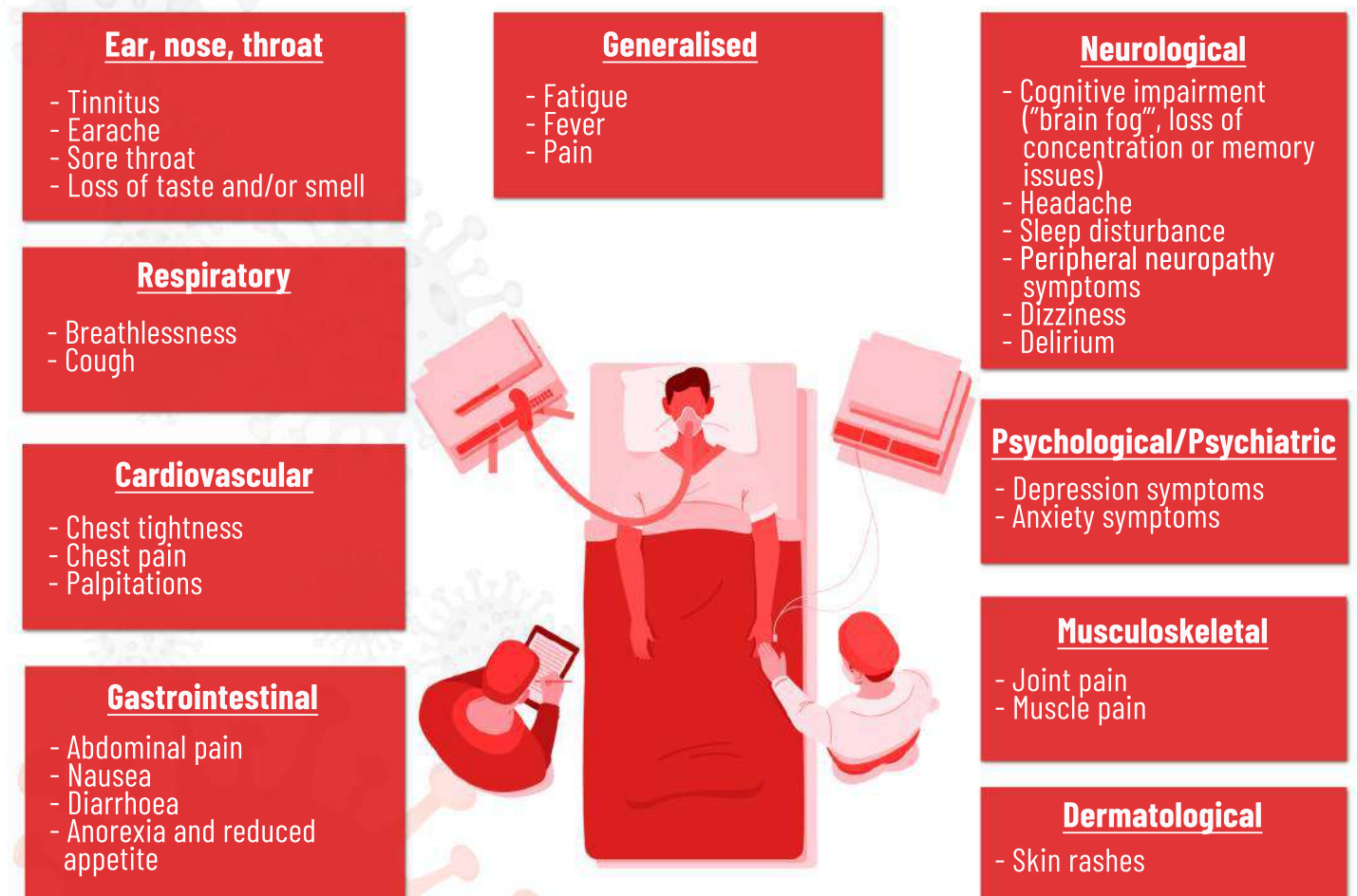


Figure 1: Reported symptoms for Long COVID

In the webinar, the COVID survivors shared their experience on how tiredness affected their daily lives, how their lost memories and brain fog affected their work and interaction with colleagues, and how their family members and colleagues supported them. On the other hand, discrimination by the public was also highlighted. However, they had very positive mindsets and accepted their current condition and worked towards full recovery.

To date, there are 2.34 million Malaysians who have recovered from COVID-19 and returned to the community. There may be up to 20% of them suffering Long COVID and some of them may not be aware about

their conditions. These individuals need to be educated / informed on when and where to seek for treatment. Support for mental wellbeing should also be provided. NGOs should establish support groups with the guidance from the health care professionals for these Long COVID individuals. The public should also be educated on Long COVID and be more supportive and empathetic towards those suffering from Long COVID. ■



Moy Foong Ming
Department of Social and Preventive Medicine

Background and Figure 1 vector adapted from starline and Freepik respectively (www.freepik.com)

FACULTY OF MEDICINE RESEARCH E-CARNIVAL 2021

Theme:
Patients and Public Involvement (PPI)
in Education, Advocacy & Research

The Faculty of Medicine (FOM), Universiti Malaya, successfully organised the Research e-Carnival from 25th to 28th October 2021. The relationship between health professionals, researchers and the general public has been under the spotlight, particularly during the COVID-19 pandemic. Hence, this year's carnival was set with a theme of "Patients and Public Involvement (PPI) in Education, Advocacy & Research" with the intention to emphasise the importance of PPI in health and social care research in our community. This was the first FOM research carnival that was conducted online, with the involvement of Non-Governmental Organisations (NGOs) and public audiences.

The carnival was hallmarked with inspiring plenary talks by Prof. Dr. Liew Su May, our PPI expert from the Department of Primary Care Medicine, Universiti Malaya, and Prof. Sir Terence Stephenson, the chair of the Health Research Authority (HRA) from University College London. Both plenary speakers addressed the importance and impact of patient and public involvement in research. Over the 4-day Research e-Carnival, participants had the opportunity to listen to a series of engaging talks from various health domains which include ethics of PPI, cancer, mental health, nutrition, child development, stigmatised

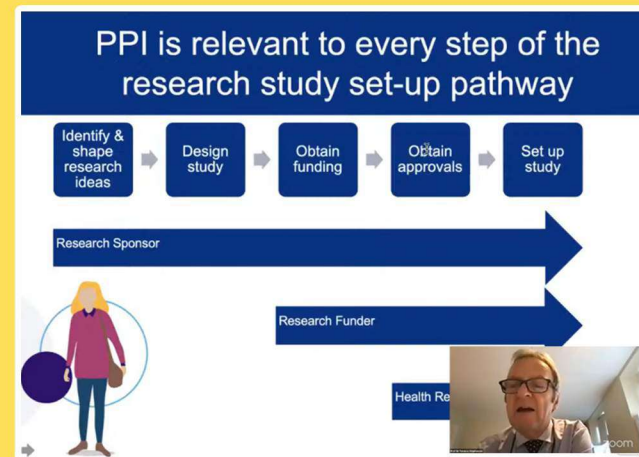


Figure 1: Plenary talk by Prof. Sir Terence Stephenson

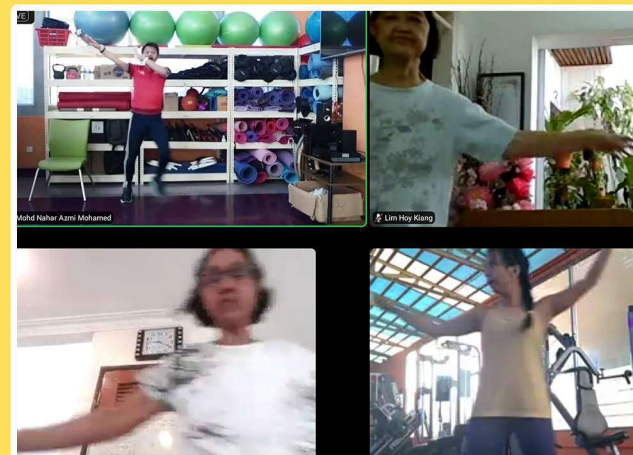


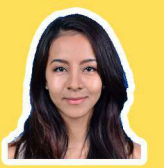
Figure 3: Interactive exercise session



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Department of Pharmacology

What is PPI?

- PPI stands for Patient and Public Involvement in research
- Research that is carried out 'with' or 'by' members of the public, rather than 'on' or 'to' them.



Figure 2: Plenary talk by Prof. Dr Liew Su May [In memorium - Prof. Dr. Liew passed away on 23 Dec 2021]

The recording of the carnival can be accessed using the following link:



health conditions, obesity, stroke rehabilitation as well as occurrence of falls in the elderly population. The carnival was honoured to have representatives from NGOs such as the National Stroke Association of Malaysia (NASAM), Yayasan Generasi Gemilang, Persatuan Insaf Murni Malaysia and Project Haans. The speakers shared their experiences, challenges and advice in pursuing PPI in research. Apart from talks, the participants also enjoyed an interactive geriatric-friendly exercise session accompanied by uplifting music. The carnival ended with the announcement of the winners of the research pitch video competition, in which students communicated their research in one minute to the lay audience.

Despite the challenges of organising an online carnival, this event has garnered over 200 registered participants and over 1,000 views on YouTube. The event drew not only the participation of FOM members but also from the Faculty of Business and Economics, Faculty of Education, Faculty of Science and Faculty of Engineering. Among affiliated external entities that had participated in the carnival include the Ministry of Health, other international and national universities and the general public from various backgrounds. ■

Vectors by brgfx and starline from Freepik (www.freepik.com)

Inauguration of the Dato' Panglima Kinta Eusoff Research Centre (DPKERC)

The opening ceremony of the Dato' Panglima Kinta Eusoff Research Centre (DPKERC) took place on 13th December 2021 and was officiated by the DYMM Paduka Seri Sultan Perak Darul Ridzuan, Sultan Nazrin Muizzuddin Shah Ibni Almarhum Sultan Azlan Muhibbuddin Shah Al-Maghfur-Lah, Chancellor of Universiti Malaya.

The ceremony was also attended by the Toh Puan Dato' Seri Hajjah Dr. Aishah Ong, Pro-Chancellor of Universiti Malaya; Tan Sri Zarinah Anwar, Acting Chairman Board of Directors, Universiti Malaya; Prof. Dato' Ir. Dr. Mohd Hamdi Abd Shukor, Vice-Chancellor of Universiti Malaya and the university management teams.



Figure 1: DYMM Sultan Nazrin Muizzuddin Shah officiated the Dato' Panglima Kinta Eusoff Research Centre on Monday, 13th Dec 2021



Figure 2: DYMM Sultan Nazrin Muizzuddin Shah with the distinguished guests during the officiating ceremony at TJ Danaraj Hall, Faculty of Medicine



Figure 3 and 4: DYMM Sultan Nazrin Muizzuddin Shah visited the Joint Surgery Laboratory at the Dato' Panglima Kinta Eusoff Research Centre (DPKERC)

The centre is named DPKERC in commemoration of Dato Dr. Haji Mohammad Eusoff, who was the fourteenth Panglima Kinta. This centre aims to serve as a central coordinating hub in supporting the faculty to lead medical research through innovation and collaboration. It is a one-stop centre to provide researchers with the support they need to become world-class researchers making a global impact.

The new DPKERC includes a joint surgery laboratory (Department of Orthopaedic

Surgery), a Research Office, a Medical Statistical Consulting Clinic (MSCC), the Cube, and a seminar room. The centre provides more conducive spaces which will help to break down silos and promote the oneness of the medical fraternity in having a common space to produce more impactful research. The idea of establishing the DPKERC was mooted in 2019 and a Memorandum of Agreement (MoA) was signed on the 26th of August 2019 with a generous donation by Datin Rayagah, who is the daughter of the late Dato Panglima Kinta Eusoff.



Figure 5: From left: YBhg Professor Dato' Ir. Dr. Mohd Hamdi Abd Shukor, YBhg Professor Dato' Dr. Adeeba Kamaruzzaman, Professor Dr. Nazirah Hasnan, Professor Dr. April Camilla Roslani, YABhg Toh Puan Dato' Seri Hajjah Dr. Aishah Ong, YBhg Tan Sri Zarinah Anwar, YBhg Datin Ragayah Dr. Haji Mohd Eusoff and YBhg Dato' Mahmood Merican

The opening ceremony was enlivened by the presence of several media who have covered the event as follows:

1. Astro Awani

[LANGSUNG] Perasmian Pusat Penyelidikan Dato' Panglima Kinta Eusoff oleh Sultan Perak | 13 Dis 2021
https://www.youtube.com/watch?v=u8X_91JxbmY

Pusat Penyelidikan Dato' Panglima Kinta Eusoff UM hab penyelidikan perubatan
<https://www.astroawani.com/berita-malaysia/pusat-penyelidikan-dato-panglima-kinta-eusoff-um-hab-penyelidikan-perubatan-336077>

Pendidikan | Pusat Penyelidikan Dato Panglima Kinta Eusoff jadi hub penyelidikan perubatan
<https://www.youtube.com/watch?v=eM3eXaF6NRE>

2. Berita Harian

Pusat Penyelidikan Dato Panglima Kinta Eusoff jadi hab penyelidikan perubatan
<https://www.bharian.com.my/berita/nasional/2021/12/898528/pusat-penyelidikan-dato-panglima-kinta-eusoff-jadi-hab-penyelidikan>

3. RTM

14 DIS 2021 – BERITA PAGI – HAB PENYELIDIKAN ; FASILITI BERIMPAK TINGGI UNIVERSITI MALAYA
<https://www.youtube.com/watch?v=RzPe4r3hfaw>

4. MalaysiaGazette

Sultan Perak Rasmi Pusat Penyelidikan Dato' Panglima Kinta Eusoff
<https://malaysiagazette.com/2021/12/13/sultan-perak-rasm-i-pusat-penyelidikan-dato-panglima-kinta-eusoff/>

Pusat Penyelidikan Dato Panglima Kinta Eusoff hab kajian berimpak tinggi
<https://malaysiagazette.com/2021/12/13/pusat-penyelidikan-dato-panglima-kinta-eusoff-hab-kajian-berimpak-tinggi/>

Sultan Perak, Sultan Nazrin Muizzuddin Shah merasmikan Pusat Penyelidikan Dato Panglima Kinta Eusoff di Fakulti Perubatan, Universiti Malaya (UM).
<https://twitter.com/malaysiagazette/status/1470222720344281088?s=24>

5. Harian Metro

Pusat Penyelidikan Dato Panglima Kinta Eusoff jadi hab penyelidikan perubatan
<https://www.youtube.com/watch?v=7y3wJIA6bK4>

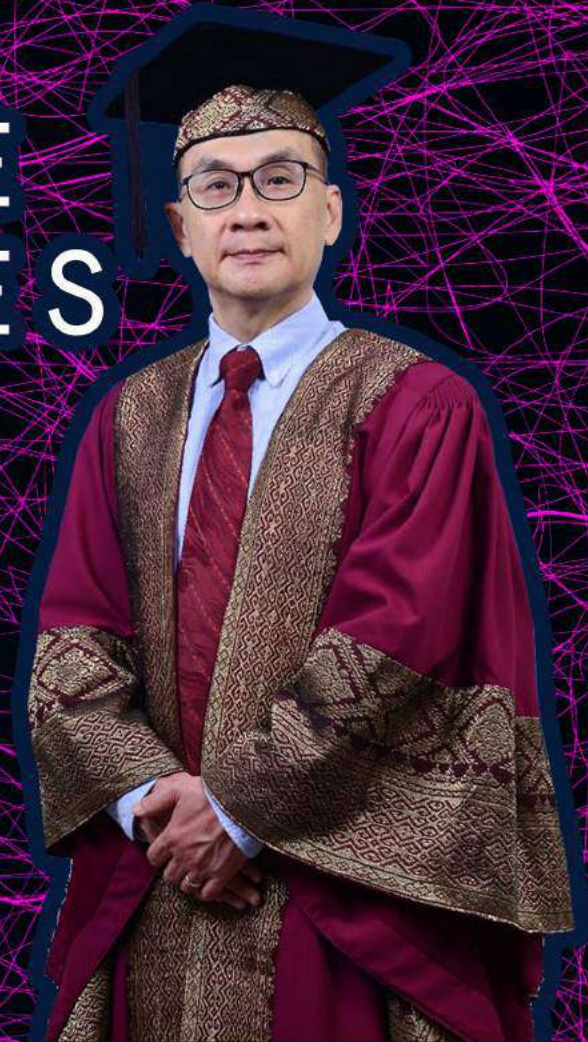


Leo Bey Fen
Research Office



Haslinda Lahuddin
Research Office

TREATABLE MYOPATHIES



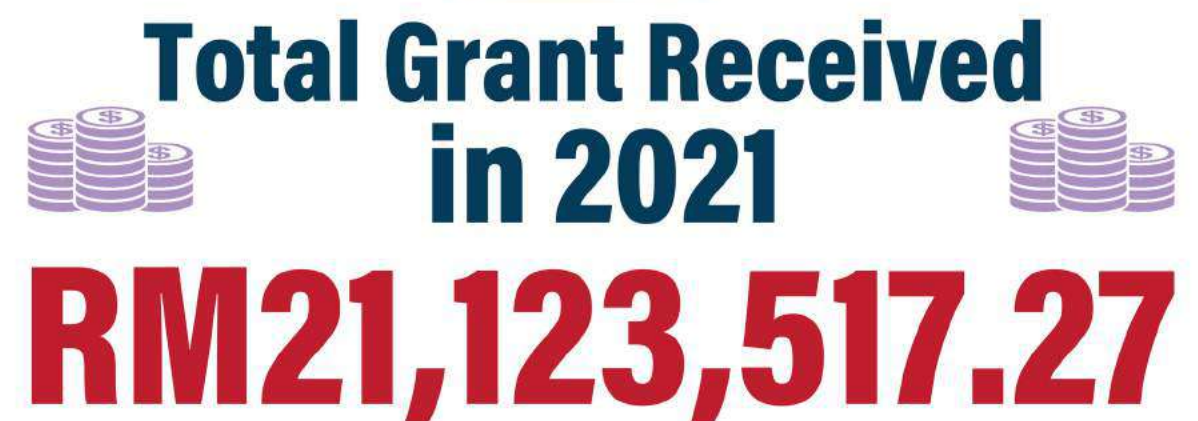
An inaugural lecture entitled "Treatable Myopathies" was delivered by Prof. Dato' Dr. Goh Khean Jin on 21st September 2021. A synopsis of his lecture is as follows:

In the lecture, he highlighted several neuromuscular disorders among the Malaysian population which are presented during adulthood instead of childhood for which specific treatments are now available. Neuromuscular disorders are a relatively uncommon and heterogeneous group of disorders involving the peripheral nervous system and consist of diseases of the anterior horn cell, peripheral nerve, neuromuscular junction and muscle. Of these, diseases of the muscle, myopathies are probably the least common compared to the other neuromuscular disorders; many of which are genetic in aetiology, and often present in infancy or childhood. Until recently, apart from the inflammatory myopathies, it was a common misconception among general physicians that

these disorders are rare and untreatable; and management is essentially supportive only.

Among the rare neuromuscular disorders that are presented and diagnosed during adulthood is Muscular Dystrophy, Lipid Storage Myopathy, Late-onset Pompe Disease, Immune-mediated Necrotising Myopathy and Hereditary Transthyretin Amyloidosis. Several of these show that local Chinese Malaysians share common mutations with other Southern Chinese populations with the possibility of a founder effect. Therefore, physicians need to recognise these disorders and refer them to a specialised neuromuscular unit for evaluation and an accurate diagnosis to be made, as there are now established and emerging therapies that could improve their outcome and

A full video of Prof. Dato' Dr. Goh Khean Jin inaugural lecture is available at: <https://www.youtube.com/watch?v=wbw2uAWHBv4> ■



RM 11,414,151.79

RM 4,203,061.70

RM 5,506,303.78

Fundamental Research Grant Scheme (FRGS)

Professor Dr Hany Ariffin (Paediatrics)

Mechanistic insights into wild-type p53 activity in childhood cancers, using *in silico* prediction and *in vitro* modelling

Professor Dr Lau Yee Ling (Parasitology)

In vitro and *ex vivo* anti-plasmodial activity of *Vernonia amygdalina* against *Plasmodium knowlesi*

Professor Dr Yvonne Lim Ai Lian (Parasitology)

Association of skin microbial dysbiosis and host genetics with fungal skin infections among underserved communities

Assoc. Professor Dr Anwar Suhaimi (Rehabilitation Medicine)

Long term effects of Covid-19 on survivors requiring intensive care treatment

Assoc. Professor Dr Mohd Idzwan Zakaria (Department of Trauma & Emergency)

A study investigating the role of infrapatellar fat pad of obese patients in activating synovial fibroblasts and osteoarthritis progression by promoting catabolic response from chondrocytes

Dr Choong Wai Kwong (Sports Medicine)

Investigating the effects of moderate physical exercise on cartilage degeneration and early subchondral bone remodelling at the tibial plateau of anterior cruciate ligament transected osteoarthritis rat models

Dr Khoo Saw Sian (Orthopaedic Surgery)

A multi-modality investigation on the prediction of early diagnosis of OA with the integration of deep learning and molecular metabolic profiles approach

Dr Sharifah Zamiah Syed Abdul Kadir (Pharmacology)

Investigating the vascular effect and molecular mechanisms of *L.rhinocerus*, a Malaysian medicinal mushroom against AGE-induced endothelial dysfunction in atherosclerosis

Prototype Research Grant Scheme (PRGS)

Professor Dr Zamri Chik (Pharmacology)

Development of industrial prototype of polymeric targeted and non-targeted nanoparticle formulation for the treatment of cancer: Preclinical and technical evaluation

Dr Chong Pan Pan (Orthopaedic Surgery)

Clinical development of autologous platelet-derived extracellular vesicles (PEV) combined with peripheral blood-derived mesenchymal stem cells (PB-MSC) as a prototype for the treatment of osteoarthritis: Clinical trials involving Phase I and Phase II

Dr Tan Sik Loo (Orthopaedic Surgery)

The clinical application of human amniotic membrane as a cell delivery vehicle in cellular therapeutic approach for treating damaged cartilage: Pre-clinical and Phase I human clinical trials

Impact-Oriented Interdisciplinary Research Grant (IIRG) Cycle 4/2021

Professor Dr Shahrul Bahyah Kamaruzzaman (Medicine)

Enhancing engagement of persons living with dementia (PLWDs) through relationship-centred care

Dr Cindy Teh Shuan Ju (Medical Microbiology)

Empowering women's healthcare with multifaceted approaches to eliminate bacterial vaginosis diagnostic confusion and social stigma

Dr. Leo Bey Fen (Dean's Office)

Discovery of novel exosome-based biomarkers for machine-learning assisted biosensing in lung cancer early detection

UMSC CA.R.E Fund Research Grant Cycle 1/2021

Professor Dr Imran Zainal Abidin (Medicine)

Estimating the economic burden of cardiovascular disease in University Malaya Medical Centre using case-mix system

Dr Shams Amir Shamsul Bahar (Orthopaedic Surgery)

A study investigating the role of mesenchymal stromal cell-derived secretome in reprogramming pro-inflammatory macrophages into anti-inflammatory phenotype

Professor Dr Alizan Abdul Khalil (Surgery)

The efficacy of perioperative parenteral ascorbic acid in reducing oxidative stress among patients undergoing free flap reconstructive surgery: A prospective multicenter randomized controlled pilot trial

Dr Sharifah Zamiah Syed Abdul Kadir (Pharmacology)

The potential pharmacological intervention of Des-aspartate Angiotensin 1 in treating obesity-induced hypertension

Assoc. Professor Dr Azanna Ahmad Kamar (Paediatrics)

Factors affecting maternal dietary intake and its association with breast milk composition and preterm infants' outcomes [PREM-MOM-DIET PROJECT]

Dr Revadi A/P Govindaraju (Otorhinolaryngology)

The efficacy of a nozzle shield for an atomizer in reducing the airborne aerosol particles in an outpatient ENT Clinic

Assoc. Professor Dr See Mee Hoong (Surgery)

The development of artificial intelligence-based techniques in precision surgical planning for breast reconstruction

Dr Teo Seow Hui (Orthopaedic Surgery)

Regeneration of medial hamstring tendon following Haryegt for anterior cruciate ligament reconstruction; A mid-term observation on comparison between two different techniques of graft harvesting

Assoc. Professor Dr Adina Abdullah (Primary Care Medicine)

Online health information and statin adherence among patients with high cardiovascular risk in primary care

Dr Leo Bey Fen (Dean's Office)

Whole-cell SELEX based identification of a novel multiplex aptamer for the development of an electrochemical biosensor for the multiplex detection of foodborne pathogens

Dr Bushra Megat Johari (Medicine)

Assessment of post-acute COVID syndrome (PACS) and serological response in confirmed COVID-19 patients admitted to the University of Malaya Medical Centre

Dr Maherah Kamarudin (Obstetrics & Gynaecology)

Randomised control trial: Oestrogen vaginal packing effect on decubitus ulcer in pelvic organ prolapse

Dr Tang Li Yoong (Nursing Sciences)

Online learning for nursing education in public universities in Malaysia during pandemic: Are we ready for it?



UM-LITER 2021

Assoc. Professor Dr Zulkarnain Jaafar (Sports Medicine)

Developing a smartphone application for work based assessment for Sport Medicine Clinical Master Programme

Assoc. Professor Dr Vinod Pallath (MERDU)

Development of entrustable professional activities (EPAs) based virtual consultation competencies framework for undergraduate medical students

Dr Eric Chung (Biomedical Imaging)

Development of an electronic topographic atlas for integrated e-learning platform in radiology

Dr Hong Wei-Han (MERDU)

Keep the passion, flip the class: An inevitable change to the traditional medical education in the verge of the digital challenge

Malaysia-France Bilateral Research Collaboration (MATCH)

Dr Oh Lixian (Paediatrics)

P53 isoforms in childhood cancers

Congratulations to all the recipients!

Universiti Malaya Faculty of Medicine PUBLICATION RECORDS IN 2021



725 total publications in year 2021



33.8% (n=224)

of the publications were published in
World's **Top 25%** impactful journal

**ISI Publication
Quartile**

Q1 224 (33.8%)

Q2 218 (32.9%)

Q3 116 (17.5%)

Q4 104 (15.7%)

*63 publications yet to be indexed

Clinical Departments



Department of
Rehabilitation Medicine

ratio: 2.89
26 publications

Para/Pre-Clinical Departments



Department of Social &
Preventive Medicine

ratio: 5.48
115 publications

TOP 3 DEPARTMENTS for 2020

(Jan 2020 - June 2021)

based on ratio of number of **ISI publications** to number of staff



Department of
Medicine

ratio: 2.46
182 publications



Department of
Parasitology

ratio: 3.92
51 publications



Department of Primary
Care Medicine

ratio: 2.41
41 publications



Department of
Pharmacology

ratio: 3.91
43 publications

AWARDS & ACHIEVEMENTS

1 The World Academy of Sciences for the Advancement of Science in Developing Countries

Professor Dr Ng Kwan Hoong (Department of Biomedical Imaging): elected as a Fellow

2 The Merdeka Award 2020

Outstanding Scholastic Achievement

Professor Dr Ng Kwan Hoong (Department of Biomedical Imaging)

3 2021 ASCoN Star Award at the 20th Asian Spinal Cord Network Conference

Prof Dr Nazirah Hasnan (Department of Rehabilitation Medicine)

4 Korea International Women's Invention Exposition 2021 (KIWIE)

Special Prize and Gold Award

Dr. Nurshamimi Nor Rashid (Department of Molecular Medicine)

Datuk Professor Dr Rohana Yusof (Department of Molecular Medicine)

5 14th National Conference for Clinical Research (NCCR)

First Runner-up in the Dr. Wu Lien-Teh Young Investigator Award

Dr. Alia Daniella Abdul Halim (Department of Social and Preventive Medicine)

6 Anugerah Persatuan Siswazah Wanita Malaysia (APSWM) 2021

Dr Wong Min Fui (Department of Social and Preventive Medicine)

7 11th Asia Pacific Paediatric Endocrine Society (APPEs)

Young Investigator Award

Winner: Dr Muhammad Muizz (Department of Paediatrics)

1st Runner up: Dr Ting Yi Wen (Department of Paediatrics)

2nd Runner up: Dr Swee Im Ng Voon (Department of Paediatrics)



HAPPY Retirement!



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DEPARTMENT OF REHABILITATION MEDICINE



ASSOC. PROFESSOR DR ROZIAH BINTI MURIDAN
DEPARTMENT OF BIOMEDICAL IMAGING



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