# 12<sup>TH</sup> Malaysia Indonesia Brunei

Medical Sciences Conference 2022

Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences Universiti Brunei Darussalam

## "COVID-19: New Learning and New Norms"

VIRTU

CONFERENCE

19<sup>th</sup>-20<sup>th</sup> September 2022

## **PROGRAMME BOOKLET**



UNIVERSITI KEBANGSAAN MALAYSIA The National University of Malaysia



FACULTY OF

MEDICINE



## TABLE OF CONTENTS

WELCOMING ADDRESS FROM THE ORGANISING COMMITTEE, UNIVERSITI BRUNEI DARUSSALAM	4
FOREWORD FROM THE DEAN OF FACULTY OF MEDICINE, UNIVERSITI KEBANGSAAN MALAYSIA	5
FOREWORD FROM THE DEAN OF FACULTY OF MEDICINE, UNIVERSITAS INDONESIA	
Scientific Programme	7
KEYNOTE LECTURE	13
DIGITAL TRANSFORMATION IN PUBLIC HEALTH: BRUNEI DARUSSALAM'S	
EXPERIENCE	13
PLENARY SESSIONS	14
PLENARY SESSION 1: BRUNEI	
MEDICAL EDUCATION IN THE NEW NORM: OPPORTUNITIES AND CHALLENGES	
PLENARY SESSION 2: MALAYSIA	
COVID-19 PANDEMIC: WHAT HAVE WE LEARNED?	
PLENARY SESSION 3: INDONESIA	16
INTERNATIONAL COLLABORATION IN HEALTH INFRASTRUCTURE DURING COVID-1	
PANDEMIC	
SYMPOSIUM SESSIONS	18
SYMPOSIUM 1: MEDICAL EDUCATION POST-COVID-19	
ACADEMIC EXPERIENCES, PHYSICAL AND MENTAL HEALTH IMPACT OF COVID-19	
PANDEMIC ON STUDENTS AND LECTURERS IN HEALTH CARE EDUCATION	
MEDICAL EDUCATION BEYOND THE PANDEMIC: A REFLECTION FOR THE FUTURE	
MEDICAL EDUCATION IN THE COVID-19 PANDEMIC: THE MALAYSIAN EXPERIENCE	-
SYMPOSIUM 2: COVID-19 RESEARCH	
COVID-19: WHAT HAVE WE LEARNED? INDONESIA EXPERIENCE	
SUICIDE PREVENTION IN HEALTHCARE WORKERS: RESEARCH AND TRANSLATIONA	
IMPACT DURING COVID-19 AND BEYOND PSYCHOLOGICAL SELF-CARE PRACTICES AMONG HEALTH SCIENCES ACADEMICS AN	
STUDENTS DURING COVID-19 PANDEMIC: AN EXPLORATORY QUALITATIVE STUDY	
SYMPOSIUM 3: PUBLIC HEALTH	
LESSONS LEARNT FROM COVID-19: PUBLIC HEALTH SURVEILLANCE	25
UTILIZATION OF HEALTH SERVICES YOUNG ADULT STUDENTS - THE EFFECT OF	-0
COVID-19 PANDEMIC	26
STRENGTHENING PUBLIC HEALTH EDUCATIONAL STRATEGIES IN A POST-COVID-1	9
WORLD	-
SYMPOSIUM 4: DIAGNOSTICS AND PATIENT MANAGEMENT	
COVID-19 HIKMAH	29
THE ROLE OF GUT MICROBIOTA, FECAL BIOMARKERS AND CIRCULATING TUMOR	
CELL IN EARLY DETECTION OF COLORECTAL CANCER	30

SARS-COV-2 SPIKE PROTEIN ANTIBODY TITRE IN FRONTLINER HEALTHCARE	
WORKERS BEFORE VACCINATION AND AFTER SECOND DOSE OF COVID-19	
VACCINATION	31
FREE PAPER	33
SYMPOSIUM 5: UNDERGRADUATE STUDENT RESEARCH PRESENTATION AND	
COMMUNITY PROJECTS	33
REFRACTIVE ERRORS OF CHILDREN SEEN AT THE SURI SERI BEGAWAN HOSPITA	L IN
2020: A RETROSPECTIVE ANALYSIS	33
EXPERIENCES OF COMMUNITY ENGAGEMENT DURING COVID-19 - BHSC PHARMA	CY
STUDENTS ENGAGED THE PUBLIC TO PROMOTE PROSTATE CANCER AWARENESS	534
INITIATING ENTREPRENEURSHIP TO IMPROVE HEALTH AMONG VILLAGERS DUR	ING
THE COVID-19 PANDEMIC: A QUALITATIVE STUDY	35
EDUCATING MATERNAL AND CHILDREN'S HEALTH TO MOTHERS AND COMMUNI	ΓҮ
HEALTH WORKERS IN LIO VILLAGE THROUGH ONLINE ACTIVITIES DURING THE	
COVID-19 PANDEMIC	
SYMPOSIUM 5: POSTGRADUATE STUDENT PRESENTATION	
ADOLESCENT PREGNANT MOTHER'S HEALTH SEEKING PRACTICE USING WHATSA	
DURING COVID-19 ENDEMIC IN INDONESIA: A QUALITATIVE STUDY	37
HETEROLOGOUS PRIME-BOOST WITH MRNA-1273 AMONG CORONAVAC-	
VACCINATED HEALTHCARE WORKERS IN INDONESIA	
ASSESSMENT OF OBSTETRIC SERVICES PREPAREDNESS AND ITS DETERMINANTS	
AMONG MATERNAL HEALTHCARE WORKERS DURING THE COVID-19 PANDEMIC	
SELANGOR	39
ORGANISING COMMITTEE	40
CONTACT US	42

## WELCOMING ADDRESS FROM THE ORGANISING COMMITTEE, UNIVERSITI BRUNEI DARUSSALAM



Senior Assistant Professor Dr Zaw Wint

Dean Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences Universiti Brunei Darussalam Dear delegates,

It is indeed an honour to warmly welcome all of you to the 12<sup>th</sup> Malaysia-Indonesia-Brunei Medical Sciences Conference that is co-organised by the Faculty of Medicine, Universitas Indonesia (UI), Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM), and Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam (UBD). This is the fourth time that Brunei has become the host for this conference, and this will be the first time that this conference is held in the virtual style.

This year's conference's theme "COVID-19: New learning and New Norms" brings together all the research and the learnt experiences from the researchers, professionals and medical educators in different fields of Medical Sciences from all three countries after we experienced the COVID-19 waves for the last 2 years. This conference is a great opportunity for us to share our views and experiences, learn from each other, present our latest research findings and develop new or strengthened existing collaboration.

Finally, I would like to thank the organising committee of the 12<sup>th</sup> Malaysia-Indonesia-Brunei Medical Sciences Conference from all three countries that have worked hard and effortlessly in organising the conference. My sincere gratitude goes to all involved, who have worked very hard in this worthwhile effort to organize and ensure the success of this conference. The commitment and dedication in organising this challenging task is something we treasure and are proud of.

It is my pleasure to welcome all participants, especially from Malaysia and Indonesia to Brunei Darussalam. The organising committee has prepared an exciting scientific programme that I am sure all of you would enjoy.

Thank you.

## FOREWORD FROM THE DEAN OF FACULTY OF MEDICINE, UNIVERSITI KEBANGSAAN MALAYSIA



Professor Abdul Halim bin Abdul Gafor

> Dean Faculty of Medicine Universiti Kebangsaan Malaysia

Firstly, I would like to congratulate Universiti Brunei Darussalam for organizing this year 12<sup>th</sup> Malaysia-Indonesia-Brunei Medical Sciences Conference. This conference is not only the platform for our universities to share experiences and challenges but also will help to catalyze future collaborations in teaching, research, and clinical practice.

More than 2 years had passed since we were shaken by the COVID-19 pandemic. It changed the way we live, interact and professionally it affected the way we manage our patients, train our young doctors, and even perform clinical research.

Alhamdullilah, we slowly recover from COVID-19 pandemic, and I would like to thank all healthcare workers for endless effort and scarifies during the fight. In the beginning of the pandemic, many of us were involved not only in managing COVID-19 patients but also in development of SOPs pertaining to our patients. Nevertheless, the fight is not over, we now realized that we were unprepared for any pandemic, either infectious or non-communicable disease pandemic. We have to work together, all professions and all sectors.

With that, I think this year theme is very appropriate "COVID-19: New learning and New Norms'. We must learn from our experiences in COVID-19 Pandemic and preparing ourselves for the new norms. We realized now that online distance learnings are becoming more popular. We acknowledged that digital medicine is becoming more important sand should be incorporated into medical syllabus. We also noted that telemedicine and ambulatory services are becoming more important.

Although this year conference is on virtual platform, I am confident that it will be beneficial for all the participants. Finally, I would like to say thank you to the committee members for their hard work.

Take care, stay safe and hopefully we will meet soon.

## FOREWORD FROM THE DEAN OF FACULTY OF MEDICINE, UNIVERSITAS INDONESIA



Professor Dr dr Ari Fahrial Syam, SpPD, K-GEH, MMB

> Dean Faculty of Medicine Universitas Indonesia

As the Dean of Faculty of Medicine, Universitas Indonesia, I am truly delighted to welcome all of you to the 12<sup>th</sup> Malaysia-Indonesia-Brunei Medical Sciences Conference 2022 hosted by Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam.

As we know, Malaysia-Indonesia-Brunei (MIB) Medical Sciences Conference is a scientific conference that is held every two years by three medical faculties from three different countries, such as PAP Rashidah Sa'adatul Bolkiah Institute of Health Sciences Universiti Brunei Darussalam (UBD), Faculty of Medicine Universiti Kebangsaan Malaysia (UKM), and Faculty of Medicine Universitas Indonesia (FMUI).

Through this biannual meeting, I hope we can always work together to improve and update our knowledge in the field of medicine as a neighbouring country in South-East Asia. The theme for this year's conference is **"COVID-19: New Learning and New Norms"** which consists of 5 symposium topics, including Medical Education Post-COVID-19, COVID-19 Research, Public Health, COVID-19 Diagnostics and Management, and Student Research and Community Projects.

I believe these topics are important to help us in dealing with the pandemic and preparing for post pandemic adjustment in many sectors. I really hope we can share our knowledge and experience in order to move towards a better future together. These two days symposium will be attended by distinguished speakers and experts from three related countries: Malaysia, Indonesia and Brunei.

With respect to the hard work, I would like to give my deep appreciation to all the organizing committees from Universiti Brunei Darussalam that have made this important conference a success. Last but not least, I would like to express my gratitude to all the keynote speakers, plenary speakers, fellow researchers, and participants that have been willing to share their experience and knowledge to us in this prestigious conference. I hope this conference will bring goods to all of us, and really help us to improve our collaborative effort to face the future challenges in health.



MEDICINE

#### 12<sup>TH</sup> MALAYSIA INDONESIA BRUNEI MEDICAL SCIENCES CONFERENCE 2022 "COVID-19: New Learning and New Norms" 19<sup>th</sup>-20<sup>th</sup> September 2022

## Scientific Programme

#### DAY 1: 19th September 2022

DAY ONE: MONDAY, 19 <sup>TH</sup> SEPTEMBER 2022		
8:00 am - 8:30 am	Arrival of Deans, Guest of Honour and all participants	
8:30 am	OPENING CEREMONY	
	Guest of Honour: YM Dr. Hazri bin Haji Kifle, Vice Chancellor, Universiti Brunei Darussalam	
8:35 am	Recitation of Surah Al-Fatihah and Doa Selamat	
	Welcoming Address by:	
	<ul> <li>Dr. Zaw Wint, Dean of PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam (UBD)</li> </ul>	
	Prof. Dr. Abdul Halim Abdul Gafor, Dean of Faculty of Medicine,	
	<ul> <li>Universiti Kebangsaan Malaysia (UKM)</li> <li>Prof. Dr. dr. Ari Fahrial Syam, Sp.PD KGEH. MMB, Dean of Faculty of</li> </ul>	
	Medicine, Universitas Indonesia (UI)	
	Speech by the Guest of Honour	
	YM Dr. Hazri bin Haji Kifle	
	Vice Chancellor, Universiti Brunei Darussalam	
9:00 am - 9:40 am	KEYNOTE LECTURE	
	Title: Digital Transformation in Public Health: Brunei Darussalam's experience	
	Speaker: Prof. Dr. Mohd Ayub Sadiq @ Lin Naing Assistant Vice Chancellor and Vice-President (Innovation & Enterprise) PAPRSB Institute of Health Sciences, UBD	

	Chair: Associate Prof. Dr. Zamri Zuhdi
	Faculty of Medicine, UKM
9:40 am -	BREAK
10:00 am	
10:00 am -	PLENARY LECTURE 1
10:30 am	
10.50 am	Title: Medical Education in the new norm: Opportunities and Challenges
	Speaker: Prof. Dr. Kenneth Kok Deputy Dean (Undergraduate Studies and Global Affairs) PAPRSB Institute of Health Sciences, UBD
	Chair: Prof. Dr. dr. Dwiana Ocviyanti, SpOG(K), MPH Vice Dean for Education, Research, and Student Affairs Faculty of Medicine, UI
10:30 am -	Symposium 1:
11:30 am:	Medical Education post COVID-19
	Chair: Dr. Hjh Mas Rina Wati Hj Abd Hamid Deputy Dean (Graduate Studies and Research) PAPRSB Institute of Health Sciences, UBD
10:30 am -	Title: Academic Experiences, Physical and Mental Health Impact of COVID-
10:45 am	19 Pandemic on Students and Lecturers in Health Care Education Speaker: Dr. Hjh Fazean Irdayati Hj Idris Senior Assistant Professor (Clinical Academia) PAPRSB Institute of Health Sciences, UBD
	, -
10:45 am - 11:00 am	Title: Medical education beyond the pandemic: A reflection for the future Speaker: Dr. Ardi Findyartini, PhD Head Medical Education Unit & Center of Medical Education Cluster Faculty of Medicine, UI
11:00 am -	Title: Medical education in the COVID-19 pandemic: the Malaysian
11:15 am	experience Speaker: Associate Prof. Dr. Jemaima Che Hamzah Deputy Dean (Undergraduate Studies) Faculty of Medicine, UKM
11:15 am - 11:30 am	Questions and Answers Session
11:30 am -	BREAK
11:35 am	
11:40 am -	Symposium 2:
12:40 am:	COVID-19 Research
	Chair: dr. Anis Karuniawati, Ph.D, Sp.MK(K)
	Vice Dean
	Faculty of Medicine, UI
11:40 am -	Title: COVID-19: What have we learned? Indonesia Experience
11:55 am	Speaker: Dr. dr. Erni Juwita Nelwan, PhD, SpPD-KPTI
-	

	Internal medicine & tropical infectious disease Specialist Department of Internal Medicine Faculty of Medicine, UI
11:55 am - 12:10 pm	Title: Suicide prevention in healthcare workers: research and translational impact during COVID-19 and beyond Speaker: Associate Prof. Dr Chan Lai Fong Psychiatrist Faculty of Medicine, UKM
12:10 pm - 12:25 pm	Title: Self-care practices among health sciences academics and students during the COVID-19 pandemic Speaker: Dr Khadizah Hj Mumin Senior Assistant Professor PAPRSB Institute of Health Sciences, UBD
12:25 pm - 12:40 pm	Questions and Answers Session
12:40 pm - 1:55 pm	LUNCH AND PRAYER BREAK
1:15 pm - 2:15 pm	Business Meeting between Deans and Invited Members from UKM, UI and UBD
2:00 pm -	PLENARY LECTURE 2
2:30 pm	Title: COVID-19 Pandemic: What Have We Learned?
	Speaker: Associate Prof. Dr. Noor Azimah Muhammad Head of the Department of Family Medicine Faculty of Medicine, UKM
	Chair: dr. Diantha Soemantri, M.Med.Ed., PhD Department of Medical Education Faculty of Medicine, UI
2:30 pm - 3:30 pm:	Symposium 3: Public Health
	Chair: Prof. Dr. Tan Geok Chin Professor of Pathology, Consultant Anatomical Pathology Faculty of Medicine, UKM
2:30 pm - 2:45 pm	Title: Lessons Learnt from COVID-19: Public Health Surveillance Speaker: Pg Dr Muhammad Ali Pg Anak Rosledzana Disease Control Division Ministry of Health, Brunei Darussalam
2:45 pm - 3:00 pm	Title: Utilization of health services among adolescent and young people - The effect of COVID-19 pandemic Speaker: Dr. dr. Dhanasari Vidiawati Sanyoto, MSc Head, Family Medicine Primary Service Study Program Faculty of Medicine, UI

3:00 pm - 3:15 pm	Title: Strengthening Public Health educational strategies in a post-COVID- 19 world Speaker: Associate Prof. Dr. Rozita Hod Head of Department of Community Health Faculty of Medicine, UKM
3:15 pm -Questions and Answers Session3:30 pm	
END OF DAY ONE	

#### DAY 2: 20th September 2022

DAY TWO: TUESDAY, 20 <sup>™</sup> SEPTEMBER 2022		
8:30 am -	Arrival of Deans and all participants	
8:45 am		
8:55 am - 9:30 am	PLENARY LECTURE 3	
9:30 am	Title: International Collaboration in Health Infrastructure During COVID-19 Pandemic	
	Speaker: Prof. Dr. dr. Ari Fahrial Syam, Sp.PD KGEH. MMB Dean	
	Faculty of Medicine, UI	
	Chair: Dr. Hjh Fazean Irdayati Hj Idris	
	Senior Assistant Professor (Clinical Academia)	
	PAPRSB Institute of Health Sciences, UBD	
9:45 am -	BREAK	
10:00 am		
10:00 am -	Symposium 4:	
11:00 am:	Diagnostics and Patient Management	
	Chair: Prof. Dr. Kenneth Kok	
	Deputy Dean (Undergraduate Studies and Global Affairs)	
	PAPRSB Institute of Health Sciences, UBD	
10:00 am -	Title: COVID-19 Hikmah	
10:15 am	Speaker: Dr Haji Muhammad Syafiq Hj Abdullah	
	Consultant Oncologist, Chief of Medical Services Ministry of Health, Brunei Darussalam	
	Ministry of Health, Druher Dalussalam	
10:15 am -	Title: The Role of Fecal Biomarkers and Circulating Tumor Cell in Early	
10:30 am	Detection of Colorectal Cancer	
	Speaker: Prof. Dr. dr. Murdani Abdullah, SpPD-KGEH, FACG, FASGE	
	(Gastroenterologists) Department of Internal Medicine	
	Faculty of Medicine, UI	
10:30 am -	Title: SARS-CoV-2 Spike Protein Antibody Titre in Frontliner Healthcare	
10:45 am	Workers Before Vaccination and After Second Dose of COVID-19	
	Vaccination	
	Speaker: Associate Prof. Dr. Hanita Othman	

	Doputy Director of Herpital Canadar Tuanky Muhrim 19/44
	Deputy Director of Hospital Canselor Tuanku Muhriz, UKM
10:45 am -	Question and Answers Session
11:00 am	
11:00 am -	BREAK
11:10 am	· · -
11:15 am -	Symposium 5:
12:15 pm:	Undergraduate Student Research Presentation and Community Projects
	Chair: Ms Chua Hui Ming & Ms Flora Lim Siao Suan
	MHSc (Research)
	PAPRSB Institute of Health Sciences, UBD
	8 minute presentation 6.2 minute OGA session
	8-minute presentation & 2-minute Q&A session
11:15 am -	Title: Refractive Errors in Children seen in SSB Hospital: A Retrospective
11:25 am	Study
	Speaker: Henry Lim Heng Li
	BHSc (Medicine) PAPRSB Institute of Health Sciences, UBD
	PARIOD Institute of fleatth sciences, ODD
11:25 am -	Title: Experiences of community engagement during COVID-19 - BHSc
11:35 am	Pharmacy students engaged the public to promote prostate cancer
	awareness
	Speakers: Ak Khairi Wazien Pg Umar, Nuraimi Farwizah binti Awang Hj Ismail, Ayuni Syahindah binti Haji Mohd Taufik, & Rusyidah binti Haji
	Junaidi
	BHSc (Pharmacy)
	PAPRSB Institute of Health Sciences, UBD
11:35 am -	Title: Initiating entrepreneurship to improve health amongst people in Lio
11:45 am	village Speakers: Angelina Patricia Chandra, Stella Kristi Triastasi, & Andito
	Mohammad Wibisono
	Undergraduate students
	Faculty of Medicine, UI
11.4E	Titles Education Maternal and Children's Use the to Mathemany
11:45 am - 11:55 am	Title: Educating Maternal and Children's Health to Mothers and Community Health Workers in Lio Village through Online Activities during
11.55 am	the COVID-19 Pandemic
	Speakers: Shafira Aurelia, Dheanita Nissrina Andini, Vahira
	Waladhiyaputri, & Garry Soloan
	Undergraduate students
	Faculty of Medicine, UI
11:55 am -	LUNCH AND PRAYER BREAK
1:45 pm	
1:45 pm -	Symposium 5:
2:25 pm:	Postgraduate Student Presentation (Free Paper)
	Chaire No Amalia Chin
	Chair: Ms Amalie Chin MPH (Public Health)
	PAPRSB Institute of Health Sciences, UBD
	TALIES Instruct of fleater sciences, obs

1:45 pm - 1:55 pm	Title: Adolescent pregnant mother's health seeking practice using WhatsApp during COVID-19 endemic in Indonesia: a qualitative study Speaker: Siti Khuzaiyah PhD Candidate PAPRSB Institute of Health Sciences, UBD
2:00 pm - 2:10 pm	Title: Heterologous prime-boost with the mRNA-1273 vaccine among CoronaVac-vaccinated healthcare workers in Indonesia Speaker: dr. Theresia Santi PhD Candidate Faculty of Medicine, UI
2:15 pm - 2:25 pm	Title: Evaluation on Obstetrics Services Preparedness and associated factors among Maternal HealthCare workers during the COVID-19 pandemic in Selangor, Malaysia Speaker: Dr. Sumaiyah binti Isamail PhD Candidate Faculty of Medicine, UKM
2:30 pm - 3:00 pm	CLOSING CEREMONY Closing Speech by Dean of Host University: Dr. Zaw Wint Dean PAPRSB Institute of Health Sciences, UBD Speech by Dean of Next Host University: Prof. Dr. Abdul Halim Abdul Gafor Dean Faculty of Medicine, UKM
END OF DAY TWO	

## **KEYNOTE LECTURE**

## DIGITAL TRANSFORMATION IN PUBLIC HEALTH: BRUNEI DARUSSALAM'S EXPERIENCE

## Professor Dr Mohd Ayub Sadiq @ Lin Naing

Assistant Vice Chancellor and Vice-President (Innovation & Enterprise)

Professor in Public Health Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

COVID-19 pandemic has accelerated the development of Digital Public Health. Digital Public Health is defined by NHS as "the combination of established public health knowledge with new digital approaches and tools." It can be disruptive with application of digital technologies including the Internet of things (IOT), virtual care, remote monitoring, big data analytics, artificial intelligence (AI), smart wearables, etc. There are potential to improve health outcomes through AI-integrated risk assessment, screening process, diagnosis, treatment decision, etc. Challenges are institutional support, limited resources and inadequate trained personnel. In this presentation, we will present two on-going digital public health research projects, and discuss issues related to ethics, confidentiality, data security, inclusiveness, reliability, involvement of the population, etc. We will also present a new graduate Digital Public Health programme offered by Universiti Brunei Darussalam.

## Biography:

Professor Dr Mohammed Ayub Sadiq is a Professor in Public Health, specialized in Biostatistics, in Universiti Brunei Darussalam. He has been a senior academician in the Public Health graduate programme and also the lead academic in the development of Digital Public Health graduate programme in UBD. His research areas are in instrument development and validation, survival cancer studies, epidemiological risk modeling, and structural equation modeling. Recently, he has led two Digital Public Health research projects (on-going) in Cardiovascular Diseases and Colorectal Cancers together with UBD Public Health and Digital Science academics, and experts from Ministry of Health, Brunei Darussalam. He has been active in the university leadership, as a Vice President (Assistant Vice Chancellor) since 2014. He is also an active researcher having over 140 publications, and over 5500 citations during his 25 years of academia. He has 25 publications in Scopus journals in the past 3 years (since 2020), majority of them were in the field of epidemiology of COVID-19 pandemic in Brunei Darussalam.

## PLENARY SESSIONS

## PLENARY SESSION 1: BRUNEI

## MEDICAL EDUCATION IN THE NEW NORM: OPPORTUNITIES AND CHALLENGES

## Professor Kenneth Kok

Deputy Dean (Undergraduate Studies and Global Affairs) Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

COVID-19 outbreak caused by SARS-CoV-2 coronavirus was declared a pandemic by WHO on 11th March 2020. As a result, governments around the world had to implement protective and preventive measures e.g., closure of non-essential businesses and educational institutions, implementing travel restrictions and mandatory quarantine of cases, as social distancing considered most effective preventative strategy. These pandemic restrictions had caused unprecedented global disruption, affecting every aspect of life including education. For medical schools & health sciences institutions, restrictions resulted in cessation of onsite classes, suspension of clinical attachments and restructuring of students' examinations.

This lecture focuses on the impact of the pandemic on medical education, teaching and learning and assessments of the Medicine programme at PAPRSB Institute of Health Sciences UBD, highlighting the changes made and the measures taken in order to deliver medical students' education during the waves of the pandemic. The lecture also compares the two modes of learning and assessment in used medical education i.e., virtual and traditional and presents the opportunities each mode offers and the challenges each faces as medical schools and health institutions adopt and adapt to medical education in the new norm, taking into consideration of the future of medical education in the light of possible future outbreaks.

## PLENARY SESSIONS

#### PLENARY SESSION 2: MALAYSIA

## COVID-19 PANDEMIC: WHAT HAVE WE LEARNED?

#### Associate Professor Dr Noor Azimah Muhammad

Head of the Department of Family Medicine,

Faculty of Medicine, Universiti Kebangsaan Malaysia

COVID-19 pandemic was declared by the WHO on 12th March 2020, and six days later, the Malaysian government announced the Movement Control Order. This had led to reorganization of many services including at the Hospital Canselor Tunku Mukhriz (HCTM) and the Faculty of Medicine of UKM. Working together with the Ministry of Health, the operation theatres, outpatient clinics and in patient services in HCTM were kept to the minimum, in order to cater the escalating number of ill COVID-19 patients that requires specialized in-patient care. Apart from the clinical work, the academic and research activities were also greatly affected in which most activities were conducted online. All these needs competent leaders, efficient human resource management, stable financial resources as well as good understanding and commitment from the employees, students, researchers and public at large. This lecture aims to discuss on the initiatives, challenges and moving forward actions taken by the HCTM and faculty during the unprecedented COVID-19 pandemic.

## PLENARY SESSION

#### PLENARY SESSION 3: INDONESIA

## INTERNATIONAL COLLABORATION IN HEALTH INFRASTRUCTURE DURING COVID-19 PANDEMIC

#### Prof. Dr. dr. Ari Fahrial Syam, Sp.PD KGEH. MMB

Dean Faculty of Medicine, Universitas Indonesia

In the industry 4.0 era, digital transformation becomes a major concern in all sectors, including medicine. Adaptation to migrate towards digitalization must be done to answer challenges, especially in the fields of medical education, research, and innovation. Collaboration is the only key for medical institutions to face dynamic changes and challenges in the medical education system. Collaboration can facilitate capacity building which can improve the quality of medical institutions. The COVID-19 pandemic is the biggest challenge to maintaining existing collaborations. We are forced to make adjustments to the limitations resulting from the pandemic. However, in the end, we are forced to make adaptive responses to those changes. We have to make the pandemic an accelerator in maintaining collaboration in the digital transformation era. Therefore, the collaboration that we have built needs to be maintained and strengthened in order to survive in any dynamic situation.

#### SYMPOSIUM 1: MEDICAL EDUCATION POST-COVID-19

## ACADEMIC EXPERIENCES, PHYSICAL AND MENTAL HEALTH IMPACT OF COVID-19 PANDEMIC ON STUDENTS AND LECTURERS IN HEALTH CARE EDUCATION

## Dr Hjh Fazean Irdayati Hj Idris

Senior Assistant Professor (Clinical Academia) Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

In keeping with nation-wide efforts to contain the spread of COVID-19, Universiti Brunei Darussalam (UBD) transformed fully its pedagogical delivery to online mode, where we investigated teaching and learning experiences, physical and mental health of undergraduate students and lecturers during the COVID-19 pandemic. We conducted a cross-sectional study on undergraduate students and lecturers in a health science faculty using a self-developed pretested guestionnaire through anonymous online data collection method. The top positive experience reported by students during online learning was becoming independent (72.8%) while lecturers learned new teaching techniques and became more innovative (50.0%). However, studying at home caused students to feel more distracted (72.0%) while lecturers felt that students' laboratory skills were compromised (44.6%). Majority of students missed eating out (68.8%) and lacked extracurricular activities (64.9%), while lecturers reported more time for exercise (51.8%), despite having more screen time (50.0%). Meanwhile, increased stress was reported in students (64.9%), though they had more time for selfreflection (54.8%). Lecturers reported a closer relationship with family (44.6%), but also felt more stressed due to deadlines, unexpected disruptions and higher workloads (44.6%). In this abrupt shift to online teaching, students and lecturers in our study identified both positive and negative experiences including the impact on their physical and mental health. Our findings are important to provide the evidence for online pedagogical benefits and can serve to promote the enhancement and adaptation of digital technology in education.

## SYMPOSIUM 1: MEDICAL EDUCATION POST-COVID-19

## MEDICAL EDUCATION BEYOND THE PANDEMIC: A REFLECTION FOR THE FUTURE

## Dr Ardi Findyartini

Head of Department of Medical Education and Medical Education Center Indonesia Medical Education and Research Institute (IMERI) Faculty of Medicine, Universitas Indonesia

COVID-19 pandemic has been challenging medical education with unprecedented implications in many ways. Most parts of our curriculum, teaching and learning processes as well as evaluation in different education programs have been adapted and renewed. While we learn to live with the pandemic, it is pertinent to reflect more comprehensively, whether we are doing the right things not just to survive. The pandemic has taught us that our task is still to graduate medical doctors who are fit for changing practice of medicine. From all of adaptations that have been conducted, we need to decide what to keep and what to improve for the future. This talk will highlight this change from the point of view of relationships of different components in medical education and adaptive leadership, with the aim to reflect on what to prepare for the future and attempt to manage current implementation of our education program. Students and teachers have been adapting in online, offline and hybrid learning environment along with managing their well-being and their relationships with their family. There has been tremendous change in the way students and teachers interact and build relationship which may influence trust development and the teachinglearning process in the current learning environment. Changes in priorities and emphasis of the curriculum approaches and content have also taken place. These complex adjustment in medical education require an adaptive leadership which tackle and support smart decisions and lay foundations for future medical education. There might not be the best ways to overcome future challenges beyond the pandemic, yet we learn that embracing our strengths to employ best practices in medical education and keep innovating are a must.

## SYMPOSIUM 1: MEDICAL EDUCATION POST-COVID-19

## MEDICAL EDUCATION IN THE COVID-19 PANDEMIC: THE MALAYSIAN EXPERIENCE

## Associate Professor Dr Jemaima Che Hamzah

Deputy Dean (Undergraduate Studies) Faculty of Medicine, Universiti Kebangsaan Malaysia

COVID-19 was initially detected in 2019 at Wuhan, China and the infection spread throughout the world. This prompted the WHO to declare a public health emergency of international concern on 30 January 2020 and lockdowns were initiated in most countries. Lockdowns are restrictions on movement, assembly and international travel, and mandated the closure of business, industry, government and educational institutions, thus preventing the usual delivery of teaching, learning and assessment method in all levels of education including medical education worldwide. Lecturers in universities need to adapt to these changes and use online teaching activities and virtual platforms to educate their students. We describe the experience in adapting the medical students' training during the COVID-19 pandemic. This experience can serve as a reference for the faculty and other educational institutions in the future to continue medical education when faced with conditions that disrupt conventional teachings.

## SYMPOSIUM 2: COVID-19 RESEARCH

## COVID-19: WHAT HAVE WE LEARNED? INDONESIA EXPERIENCE

## Dr Erni Juwita Nelwan

Division of Tropical and Infectious Diseases, Department of Internal Medicine, Cipto Mangunkusumo National Center Hospital, Faculty of Medicine Universitas Indonesia

Introduction: During COVID-19 pandemic many stakeholders had collaborated to find the best solution to reduce morbidity and mortality. Universitas Indonesia, in particular Faculty of Medicine, as one of the education and research center is inevitably involved in the rapid activities of research. We focused on the prevention and diagnosis of COVID-19 and also treatment issue. This paper aims to provide a summary of what we have done over the last 2 years and go on.

Methods: We describe the research methods accord to the research objectives. For COPCOV Study: Chloroquine/ hydroxychloroquine prevention of coronavirus disease (COVID-19) in the healthcare setting and RECOVERY studies: Randomised Evaluation of COVID-19 Therapy, which focused on the prevention and treatment for COVID-19, we use the cohort perspective method. In addition to that, cross sectional approached was done in FASTER study: the Diagnostic performance of SARS-CoV2 antigen-based rapid test for triage use of COVID-19 symptomatic patients in Indonesia also the SCOVEX: a diagnostic study evaluating Saliva Sampling with Reverse Transcription Loop-mediated Isothermal Amplification (LAMP). The research was conducted from August 2020 up to now in several hospitals in Indonesia. All research ethics have been granted by the Research Ethics Committee of Universitas Indonesia and collaborators.

Results: a. COPCOV: 535 patients finished the clinical trial. Currently, we are in the process of sending samples to the central lab for chloroquine pharmacokinetic and SARS Cov2 serology testing, preparation of site closure, and final evaluation.

b. RECOVERY: This trial finds no benefit from azithromycin, hydroxychloroquine, convalescent plasma, aspirin, colchicine, lopinavir-ritonavir, in patients hospitalised with COVID-19. However, Baricitinib, Regeneron's monoclonal antibody combination, Low-cost dexamethasone, and Tocilizumab reduce deaths in patients hospitalised with COVID-19. At present, we are still in the recruitment process to assess the effect of other COVID-19 medications.

c. FASTER: We collected 445 samples in patients above one year of age, 48 (10.5%) were positive by Ag-RDT and 58 (13%) were positive by RT-PCR and 95.7% were  $\leq$  Ct 30. The overall diagnostic performance of the COVIOS® Ag test meets WHO recommended values with sensitivity ( $\geq$  80%) and specificity ( $\geq$  97%).

d. SCOVEX: Between August 2020 and May 2021, we enrolled 159 patients with suspected SARS-CoV-2 infection, of whom 75 (47%) had a positive PCR on the

nasopharyngeal swab (NPS). LAMP sensitivity was higher for NPS and FS specimens with high viral loads (87.1% and 75.0% for Ct value < 26, respectively). LAMP on either NPS or FS could offer an accessible alternative for SARS-CoV-2 diagnosis in low-resource settings.

Conclusion: From our experience, engaging in global research with multi-centers involvement can be done aptly. These exposures have become new learning material for researchers and provide Evidence-Based Medicine (EBM) practices for Indonesia and to a larger community.

## SYMPOSIUM 2: COVID-19 RESEARCH

## SUICIDE PREVENTION IN HEALTHCARE WORKERS: RESEARCH AND TRANSLATIONAL IMPACT DURING COVID-19 AND BEYOND

## Associate Professor Dr Chan Lai Fong

Psychiatrist, Department of Psychiatry Faculty of Medicine, Universiti Kebangsaan Malaysia

The health-care worker population is at significant risk of psychological distress and suicidal behaviour particularly in the context of being front-liners during the COVID-19 pandemic. Health-care worker suicide risk formulation is a complex interplay between pre-existing or emergent mental health conditions and structural challenges compounded by the pandemic, i.e., occupational stressors, organizational inadequacies; socio-economic and gender disparities. The phenomenon of burnout and moral injury are important targets for health care worker suicide prevention. Strategies to combat stigma are critical in reducing help-seeking barriers among health care workers. Prioritization of resources for translational research in health care worker suicide prevention is an urgent priority for patient safety and the integrity of health-care systems. Resilience, post-traumatic growth, and collective altruism within local and regional sociocultural contexts of academic medicine are tangible areas for increased global collaboration. Evidence-based suicide prevention interventions for health-care workers at the individual and systemic level will be discussed in the context of the COVID-19 pandemic and beyond.

#### SYMPOSIUM 2: COVID-19 RESEARCH

## PSYCHOLOGICAL SELF-CARE PRACTICES AMONG HEALTH SCIENCES ACADEMICS AND STUDENTS DURING COVID-19 PANDEMIC: AN EXPLORATORY QUALITATIVE STUDY

## Dr Khadizah Hj Mumin

Senior Assistant Professor Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

Background: Over two years of the COVID-19 era, health sciences academics and students have undergone various educational challenges that lead them to experience adverse mental health. A primary and fundamental coping strategy initiated by the students is self-care practices to strengthen them psychologically. This study explored psychological self-care practices among health sciences academics and students.

Methods: An exploratory qualitative study through 12 focus group discussions with health sciences academics (n=15) and students (n=46) was conducted at the largest university in Brunei. Data were analysed thematically using the principles underpinning Constructivist Grounded Theory (Charmaz, 2021).

Results: Four themes emerged: 1) 'if not ourselves, who else?' - self-autonomy and empowerment of mental health; 2) 'broadening the horizon' - activities undertaken for self-reassurance; 3) 'Let the feelings out' - responsibly expressing and handling emotions; 4) 'Patience, faith, and persevere' - being patience, embracing religiosity and perseverance in enduring daily challenges positively.

Conclusions: As the government prioritized the containment of COVID-19, educational challenges ensued, and health sciences academics and students' mental well-being were unintentionally placed at risk. This study depicts the importance of adapting positive psychological self-care practices to strengthen mental health and develop resilience.

#### SYMPOSIUM 3: PUBLIC HEALTH

## LESSONS LEARNT FROM COVID-19: PUBLIC HEALTH SURVEILLANCE

## Pg Dr Muhammad Ali Pg Anak Rosledzana

Disease Control Division Ministry of Health, Brunei Darussalam

COVID-19 has posed many challenges and opportunities for governments worldwide. Public Health Brunei Darussalam has set out to tackle these challenges with the adoption of technology such as the national m-Health app BruHealth (front-facing) and its associated Digital Pandemic Management System (back-end) in implementing its control measures to curb the pandemic. This rapid adoption has considerably offset the large demand in the healthcare system, especially in terms of contact tracing, patient management, and close contact management. As the pandemic draws to a close, it has highlighted the importance of strengthening preparedness and response capacities not only towards the current disease of interest but also toward emerging disease. Thus, the next step is to build on COVID-19's success and extrapolate it for public health surveillance and tackling new emerging diseases so that COVID-19 tools need not be wasted.

## SYMPOSIUM 3: PUBLIC HEALTH

## UTILIZATION OF HEALTH SERVICES YOUNG ADULT STUDENTS -THE EFFECT OF COVID-19 PANDEMIC

## Dr. dr. Dhanasari Vidiawati Sanyoto, M.Sc

Head, Family Medicine Primary Service Study Program Faculty of Medicine, Universitas Indonesia

Objective: To identify differences before and during the pandemic regarding the utilization of university clinics by students who young adult ages students compared to other ages, the gender differences of young adult ages students and all ages in university clinic utilization, and to identify the most clinical diagnoses were made before and during the COVID-19 pandemic.

Design: Descriptive, cross-sectional survey.

Setting: Medical record of 3 University Clinics of Indonesia, there were Universitas Indonesia (UI) clinic, Universitas Gadjah Mada (UGM) clinic and Universitas Airlangga (UB) clinic.

Main outcome measures: Total patients of using university clinics for medical care, dental care and psychology consultation sessions during 2019-2021.

Results: The adjustment of clinical services in the face of the pandemic varies. University clinics change face-to-face services from offline to online at different times. In 2019, before the pandemic, the young adult age students attending clinical universities compare all ages at UI, UGM and UA were 56,35%, 1,89% and 16.1%, respectively. In 2020 and 202, while the activity campus was 100% online, the utility of young adult age students in clinical universities compare all ages at UI, UGM and UA were 51,6 %, 37,61%, 9,1% respectively and, 36,2%, 74,59% and 11,94% respectively. compared to men, young women use clinical services at UI, UGM and UA respectively 62.2%, 58.6% and 66.97%. Meanwhile, women of all ages use clinical services at UI, UGM and UA 54.7%, 56.7% and 49.8%, respectively. Most diagnoses made in 2019 and 2021 underwent many changes. In addition to the many services related to COVID-19, services related to mental health problems have experienced a sharp increase.

Conclusion: There are differences in the use of university-clinics services among young adult students of all ages before and during the COVID-19 pandemic. In UI clinic and UNAIR clinic, showed the utilities of young adult decreased, but in UGM clinic showed increase utilities of young adult age compare all ages.

There are differences in the use of university-clinics services between the genders of young adult students and all ages during the pandemic. In UI clinic

and UNAIR clinic, showed females young adult patient came more than males, but in UGM clinic showed that males young adult patients came more.

The 20 most diagnosis made by universities-clinics showed increasing mental health problems among all diagnoses beside COVID-19 infections, obesity and prevention cares (vaccination).

## SYMPOSIUM 3: PUBLIC HEALTH

## STRENGTHENING PUBLIC HEALTH EDUCATIONAL STRATEGIES IN A POST-COVID-19 WORLD

## Associate Professor Dr Rozita Hod

Head of Department of Community Health Faculty of Medicine, Universiti Kebangsaan Malaysia

Introduction: COVID-19 was the greatest pandemic to hit Malaysia since the 1918 Spanish flu. The pandemic caused disastrous health, societal and economic impacts and imposed unprecedented challenge for society, affecting those already subject to unacceptable health inequalities. It serves as a painful reminder of the importance of a solid and capable public health system.

Methods: Various limitations in the public health system have been uncovered by the pandemic, and the rapid spread of misinformation that needs to be countered. In this present era, currently shaped by COVID-19, while acknowledging the challenges and transitions in public health, there is an urgent need to strengthen our public health education strategies to face future unknown pandemics.

Results/Discussion: We need to prepare our future public health workforce to be equipped with the critical knowledge and skills relevant to the 21st century global health issues. The four strategies are: i) develop expertise and proficiency in identifying and reducing the effects and spread of info-demic; ii) develop expertise in learning and application of digital technologies in data collection, synthesis and dissemination of decisions in a timely manner; iii) priority setting and resource allocation issues, ethical concerns. iv)training and expertise in supply chain management (procurement, storage, distribution of medications, PPEs, equipment and vaccines).

Conclusion: Future public health workforce must be able to navigate through these sensitive and vital issues with an informed, pragmatic and ethical approach in order to successfully manage future pandemics in a post-pandemic world.

## SYMPOSIUM 4: DIAGNOSTICS AND PATIENT MANAGEMENT

## COVID-19 HIKMAH

## Dr Haji Muhammad Syafiq Hj Abdullah

Consultant Oncologist, RIPAS Hospital, Chief of Medical Services, Department of Medical Services Ministry of Health, Brunei Darussalam

The talk will be sharing the real-world experience of clinical management of COVID-19 pandemic in Brunei with opportunity for research and training.

#### SYMPOSIUM 4: DIAGNOSTICS AND PATIENT MANAGEMENT

## THE ROLE OF GUT MICROBIOTA, FECAL BIOMARKERS AND CIRCULATING TUMOR CELL IN EARLY DETECTION OF COLORECTAL CANCER

## Professor Dr. dr. Murdani Abdullah, SpPD-KGEH, FACG, FASGE

Division of Gastroenterology, Pancreatobiliary, and Digestive Endoscopy Department of Internal Medicine, Dr Cipto Mangunkusumo National General Hospital Faculty of Medicine, Universitas of Indonesia

Introduction: Colorectal cancer (CRC) is the third most common malignancy globally and the fourth leading cause of cancer death. The diagnosis of colorectal cancer is often delayed which leads to poor prognosis. Colonoscopy has been used to diagnose and monitor the disease, but it is costly and has limited availability in Indonesia health care centers. Therefore, minimally invasive method for screening and early detection needs to be developed. Fecal biomarkers and circulating tumor cell (CTC) are promising for early detection of CRC.

Methods: There were two cross-sectional studies performed at Cipto Mangunkusumo Hospital. The first study recruited 57 suspected CRC patients who underwent colonoscopy, tested for FIT, faecal CEA, MMP-9. The second study recruited 80 suspected CRC patients who were tested for CTC.

Results: The best combination of fecal biomarkers to diagnose colorectal cancer is FIT, CEA, MMP-9 with 0,835 AUC and 1.00 predicted probability. CTCs in the blood are expected to be used as a non-invasive diagnostic marker in patients with CRC. CTCs detection by negative selection immunomagnetic method and CD44 cancer mesenchymal marker with a CTC cut-off point of >1.5 cells/mL, showed that the sensitivity, specificity, PPV, NPV, PLR, NLR were 50%, 88.89%, 93.94%, 34.04%, 4.5 and 0.56 respectively. It was found that cancer histopathological differentiation variable had a significant relationship (p<0.05) with the number of CTCs.

Conclusion: Optimizing the detection accuracy for minimally invasive CRC screening is urgently needed to reduce the incidence of CRC and associated mortality rates.

## SYMPOSIUM 4: DIAGNOSTICS AND PATIENT MANAGEMENT

## SARS-COV-2 SPIKE PROTEIN ANTIBODY TITRE IN FRONTLINER HEALTHCARE WORKERS BEFORE VACCINATION AND AFTER SECOND DOSE OF COVID-19 VACCINATION

## Associate Professor Dr Hanita Othman

Deputy Director of Hospital Canselor Tuanku Muhriz, Department of Pathology, Faculty of Medicine, National University of Malaysia, Kuala Lumpur, Malaysia

Introduction: Healthcare workers (HCW) are at risk of developing SARS-CoV-2 infection and spreading it to others. Vaccines are used to reduce infection, mortality, and morbidity. We aim to determine the response of SARS-CoV-2 Spike Protein antibody titre (anti-S1) in frontliner HCW before and after two doses of COVID-19 vaccination.

Methodology: This is a prospective study involving HCW at Hospital Canselor Tuanku Muhriz (HCTM) who received Pfizer vaccination. The respondents had their blood taken before vaccination, 3 weeks after the first vaccination and 2 - 3 weeks after the second vaccination. All respondents were followed-up for adverse reactions as well as COVID-19 infection. Descriptive statistics, Mann-Whitney U Test and general linear model (GLM) analyses were carried out.

Results: A total of 243 respondents were enrolled, in which 4 (1.6%) of them were infected with COVID-19 prior to vaccination; and 4 (1.6%) developed a breakthrough infection. In the GLM, the anti-S1 increased significantly from the baseline (mean  $1.97 \pm 15.39 \text{ U/mL}$ ), to post first dose (mean  $152.12 \pm 315.47 \text{ U/mL}$ ) to post second dose (mean 2036.34 ± 647.91 U/mL) (p < 0.001). The mean anti-S1 levels were higher in those with prior SARS-CoV-2 infection than those without, where the baseline was (95.53 vs. 0.4 U/mL), post-first dose (2244.25 vs. 117.11 U/mL), and post-second dose (2500.00 vs. 2028.57 U/mL). Most respondents had local adverse reactions after receiving the first dose of vaccination and systemic reactions after the second dose.

Conclusion (s): The Pfizer vaccine is effective at eliciting a high titre of anti-S1 after second dose of vaccination and able to reduce the severity of infection in those with breakthrough infection. The vaccine's safety profile is tolerable, and no serious adverse reactions have been reported.

# FREE PAPER ABSTRACTS

#### SYMPOSIUM 5: UNDERGRADUATE STUDENT RESEARCH PRESENTATION AND COMMUNITY PROJECTS

## REFRACTIVE ERRORS OF CHILDREN SEEN AT THE SURI SERI BEGAWAN HOSPITAL IN 2020: A RETROSPECTIVE ANALYSIS

## Henry Lim Heng Li

BHSc (Medicine) Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

Aims: To determine the prevalence of refractive errors and assess their association with known risk factors: age, gender, ethnicity, and family history.

Methods: A cross-sectional, 1-year retrospective study of 6 to 18 years old patients that attended the Optometry clinic, at Suri Seri Begawan Hospital (SSBH), a secondary district hospital in 2020 was conducted. The following data were collected: age, gender, ethnicity, family history of spectacles, and spherical equivalent refractions. The analysis included data from 403 patients (mean age:  $11.8 \pm 3.39$  years). Chi-square, Fisher's exact, and Multiple Logistic Regression tests were used to analyze the data and assessed their significance and associations between the demographic factors and refractive errors.

Results: Myopia (68.7%) was the most prevalent, followed by hypermetropia (13.4%), emmetropia (8.2%), mixed astigmatism (7.4%), and anisometropia (2.2%). In terms of severity, low myopia was the most prevalent (57.0%), followed by moderate myopia (30.7%) and high myopia (12.3%). Two significant associations were found in low myopia: between age and Chinese (p = 0.043), and between family history and Chinese (p = 0.043). In moderate myopia, a significant association was found between age and family history (p = 0.040). Overall, myopia was the commonest (68.7%) across all ages and ethnicities. There was over a 20% increase in myopia within these age groups compared to a similar study conducted in 2014. This could be attributed to the stringent social distancing measures and online learning with increased screen time exposure during the COVID-19 pandemic.

## SYMPOSIUM 5: UNDERGRADUATE STUDENT RESEARCH PRESENTATION AND COMMUNITY PROJECTS

## EXPERIENCES OF COMMUNITY ENGAGEMENT DURING COVID-19 -BHSC PHARMACY STUDENTS ENGAGED THE PUBLIC TO PROMOTE PROSTATE CANCER AWARENESS

## Ak Khairi Wazien Pg Umar, Nuraimi Farwizah binti Awang Hj Ismail, Ayuni Syahindah binti Haji Mohd Taufik, Rusyidah binti Haji Junaidi

BHSc (Pharmacy) Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

Introduction: About 1 in 8 men will be diagnosed with prostate cancer during his lifetime. In Brunei Darussalam, prostate cancer is on the list of the top 3 most common cancers among men, but unfortunately, awareness of the disease is relatively inadequate. Hence, there is the need to educate the public on the importance of early screening and recognizing the sign and symptoms of prostate cancer.

Methods: General information about prostate cancer was shared through social media, particularly Instagram (@prostatecancer.bn). A webinar was held on the 24th of September 2021 via the Zoom platform. In addition, a virtual run event, with tagline "We all fight together", was organized to increase prostate cancer awareness.

Discussion: During the webinar, there were over 40 people in attendance. The public's knowledge and awareness of prostate cancer and the effectiveness of the webinar were assessed by distributing pre- and post-questionnaires and a Kahoot! Quiz. Furthermore, the virtual run event allowed participants to express unity and solidarity toward the prostate cancer community. Overall, it was a successful event, but there were challenges encountered during the organization of the event. The COVID-19 outbreak caused a major social lockdown on a national level and prevented the talk to be conducted in-person, specifically targeting the elderly, and reducing the number of participants for the virtual run. Despite the difficulties, positive feedback was received during the webinar and the project was an opportunity for the students to spur their skills in teamwork and public communication.

#### SYMPOSIUM 5: UNDERGRADUATE STUDENT RESEARCH PRESENTATION AND COMMUNITY PROJECTS

## INITIATING ENTREPRENEURSHIP TO IMPROVE HEALTH AMONG VILLAGERS DURING THE COVID-19 PANDEMIC: A QUALITATIVE STUDY

## Stella K. Triastari<sup>1</sup>, Angelina Patricia Chandra<sup>1</sup>, Andito M. Wibisono<sup>1</sup>, Dewi Friska<sup>2</sup>

<sup>1</sup>Undergraduate Medical Doctor Program, Faculty of Medicine, Universitas Indonesia, Indonesia <sup>2</sup>Community Medicine Department, Faculty of Medicine, Universitas Indonesia, Indonesia

Introduction/Aim: Community development in Lio Village performed by Faculty of Medicine Universitas Indonesia students aimed to improve the health status of villagers. Because economy correlates with health, an economic intervention may increase the health status of the people. Based on this, an entrepreneurship program was initiated as a part of a community development program. Methods: This study is a qualitative study that was conducted between July 2020 and February 2021. The intervention consisted of asynchronous webinar sessions, workshops, and business competition. Data were gathered from post-test questionnaires through a Google form. The winners were chosen according to the business ideas and given prizes. Then, a follow-up interview was conducted to measure the benefits of the intervention.

Results/Discussion: For the results, more than 50% of the participants understood the theory by answering correct questions in the post-evaluation forms. The participants also reported feeling happier and having better mental health. Of the 88 medical students who volunteered in the event, 78.2% felt a tremendously beneficial experience of community empowerment and 21.8% felt they have experienced community empowerment. In conclusion, remote-online community development intervention may be a solution during the COVID-19 pandemic. By acknowledging the importance of the economic aspect to health and improving aspects that influence health holistically, both economic and health states of the people may be improved.

#### SYMPOSIUM 5: UNDERGRADUATE STUDENT RESEARCH PRESENTATION AND COMMUNITY PROJECTS

## EDUCATING MATERNAL AND CHILDREN'S HEALTH TO MOTHERS AND COMMUNITY HEALTH WORKERS IN LIO VILLAGE THROUGH ONLINE ACTIVITIES DURING THE COVID-19 PANDEMIC

Shafira Aurelia<sup>1</sup>, Dheanita Nissrina Andini<sup>1</sup>, Vahira Waladhiyaputri<sup>1</sup>, Garry Soloan<sup>1</sup>, Dewi Friska<sup>2</sup>

<sup>1</sup>Undergraduate Medical Doctor Program, Faculty of Medicine, Universitas Indonesia, Indonesia <sup>2</sup>Community Medicine Department, Faculty of Medicine, Universitas Indonesia, Indonesia

Introduction: To raise awareness and understanding towards maternal and children's health, FMUI students held a program called Tinggi Cerdas as one of its community development programs in Kampung Lio, Depok, West Java. Due to COVID-19 pandemic, the program had to adapted into online meetings. This study evaluates the impacts of online activity in raising participant's awareness and knowledge of maternal and children's health.

Method: The program lasted from September to December 2021 with four different topics explained by FMUI students as volunteers using WhatsApp video calls. Educational booklet was used to help giving participants a better understanding. Community health workers (CHWs) were given a workshop about PrimaKu® application to help their duty in raising mothers' awareness to monitor their children's growth and development. Pre- and post-tests were used to evaluate the activity impacts on participants' knowledge. Satisfactory questionnaires were used to assess participants, CHWs, and volunteers' satisfaction towards the program.

Results: 13 mothers from Kampung Lio participated in the first activity but only 5 lasted until the last activity. Post-test scores were higher compared to pre-test scores on all activities (100%). Correct answers on 13 questions out of 20 (65%) increased after the activities. Participants, CHWs, and volunteers were all satisfied with the program and wished for the program to be held again.

## SYMPOSIUM 5: POSTGRADUATE STUDENT PRESENTATION

## ADOLESCENT PREGNANT MOTHER'S HEALTH SEEKING PRACTICE USING WHATSAPP DURING COVID-19 ENDEMIC IN INDONESIA: A QUALITATIVE STUDY

#### Siti Khuzaiyah

PhD Candidate Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

Background: Adolescents' pregnant mothers can potentially have a problem related to their immature physic and psychology. Their health-care-seeking practice is essential to ensure that adolescent pregnant mothers receive adequate care during their pregnancy. During the COVID-19 endemic, online media should be perceived as an alternative way to help adolescents seek care during pregnancy. This study aimed to explore the experiences of pregnant adolescent mothers who had practiced healthcare seeking and followed online counselling using WhatsApp groups.

Methods: This qualitative survey recruited 15 Indonesian pregnant mothers aged 15-19 who had followed WhatsApp online counselling. An open-ended questionnaire was used to collect data, which were analyzed using thematic content analysis.

Results: There were three themes related to the experiences of adolescent pregnant mother care-seeking practice using WhatsApp group: effective, benefits, exciting factors, and suggestions. The benefits have sub-themes: giving information, easy access by mothers, and sharing experiences.

Conclusions: Adolescent pregnant mothers had good experiences in practicing health-care seeking using WhatsApp groups. They were more enthusiastic about following the counselling process and found beneficial information and solution regarding their problem during pregnancy. The findings show that providing WhatsApp groups for adolescent pregnant mothers could benefit them.

#### SYMPOSIUM 5: POSTGRADUATE STUDENT PRESENTATION

## HETEROLOGOUS PRIME-BOOST WITH MRNA-1273 AMONG CORONAVAC-VACCINATED HEALTHCARE WORKERS IN INDONESIA

## Dr. Theresia Santi

Paediatrics, PhD Candidate Faculty of Medicine, Universitas Indonesia

Aim: This study was performed to investigate humoral immune response and adverse event upon the heterologous prime-boost with a single dose of the mRNA-1273 vaccine among fully CoronaVac-vaccinated, infection-naïve healthcare workers in Indonesia.

Methods: One hundred twenty-five eligible healthcare workers at one hospital were recruited into this prospective cohort study. Blood collection was conducted twice, i.e., on 7 days before and 28 days after the booster vaccination. Titer of anti-SARS-CoV-2 RBD antibodies were quantified accordingly. An online survey on the post- vaccination adverse events was conducted on the seventh day post-booster. Wilcoxon matched-pairs signed rank test was used to test differences between groups.

Results: A significant increase was observed in titer of anti-SARS-CoV-2 RBD antibodies upon receiving the mRNA-1273 booster (geometric mean titers of 65.57 and 47,445 U/mL in pre- and post-booster, respectively), supporting the argument to use heterologous prime-boost vaccination to improve the protection against COVID- 19 in a high-risk population. The mRNA-1273 vaccine, however, caused a higher frequency of adverse events than the CoronaVac vaccine. Nonetheless, the adverse events were temporary as all subjects were not hospitalized and fully recovered. Of note, no breakthrough infection was observed during the follow up to 12 weeks post- booster. The heterologous prime-boost vaccination of healthcare workers with a single dose of the mRNA-1273 vaccine generated a significant elevation in humoral immune response towards RBD of SARS-CoV-2 and was associated with a higher frequency, but transient, adverse events.

## SYMPOSIUM 5: POSTGRADUATE STUDENT PRESENTATION

## ASSESSMENT OF OBSTETRIC SERVICES PREPAREDNESS AND ITS DETERMINANTS AMONG MATERNAL HEALTHCARE WORKERS DURING THE COVID-19 PANDEMIC IN SELANGOR

## Dr Sumaiyah Isamail

PhD candidate Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia

Introduction/Aim: The COVID-19 pandemic has been spreading rapidly since 2019, leading to devastating consequences worldwide, as well as putting healthcare providers at high risk. This study intends to assess the awareness and preparedness activities among maternal healthcare (MHC) workers and to determine determining factors that leads to obstetric services' preparedness in ten Government Hospitals in Selangor.

Methods: A cross-sectional survey was conducted among 409 MHC workers which include doctors, nurses and midwives in the government hospitals in Selangor between May 2022 till June 2022. Respondents were given questionnaires which include socio-demographic background, knowledge, awareness and attitude as well as the obstetric services' preparedness activities in managing the COVID-19 pandemic.

Result/Discussion: Majority of the respondents were nurses/midwives (87.5%), female (98.5%), age 35-45 years old (48.5%), had working experience more than 5 years (92.7%), had good knowledge and awareness (92.2%) and good obstetric services preparedness (88.3%). However, only about half (54.0%) of them had good attitude towards COVID-19. When controlling for confounding factors, multivariate analysis showed that working period (p<0.001), knowledge and awareness (p<0.001) and attitude (p<0.001) were significant predictive factors of obstetric services' preparedness during the COVID-19 pandemic. The findings in this study revealed that an effort should be made to further increase the knowledge and awareness of MHC workers about COVID-19 and to improve the positivity of their attitude towards this pandemic so that they can provide better obstetric services especially in the current and future pandemics to come.

## $12^{\text{TH}}$ MALAYSIA INDONESIA BRUNEI MEDICAL SCIENCES

## CONFERENCE

## UNIVERSITI BRUNEI DARUSSALAM

## **ORGANISING COMMITTEE**

Co-chairpersons:	Dr Zaw Wint Professor Dr Abdul Halim Abdul Gafor Professor Dr dr Ari Fahrial Syam
Deputy co-chairpersons:	Prof Dr Kenneth Kok Associate Professor Dr Hjh Mas Rina Wati Hj Abd Hamid
Co-secretaries:	Dr Siti Hanna binti Muharram Dr Muhammad Hazim bin Hj Abdul Ghani Dr Hjh Hanisah Hj Awg Sharif Nurathirah Salihah binti Haji Mohd Salleh Noorul Hasyimah Bazilah binti Hj Muhammad Irwan Secretariat from UKM Secretariat from UI

#### Scientific committee

#### Programme E-book Committee

Associate Professor Dr Mark IR Petalcorin (Lead) Associate Professor Dr Lie Chen Dr Rajan Rajabalaya Dr Lu Zen Huat Dr Siti Hanna binti Muharram Dr Suwarni binti Hj Mohd Diah Dr Muhammad Hazim bin Hj Abdul Ghani Dr Hjh Hanisah Hj Awg Sharif

#### Finance

Nurathirah Salihah binti Haji Mohd Salleh Ms Mah Wai Fong Finance staff

#### Registration, Poster, Website and E-certificate

Dr Lim Mei Ann (Website Lead) Dr Ihsan Nazurah binti Zulkipli (Registration Lead) Dr Hjh Hanisah Hj Awg Sharif (Registration and Poster) Dr Muhammad Hazim bin Hj Abdul Ghani (Poster Lead, Registration and E-certificate) Dr Liyana binti Haji Ahmad (E-certificate Lead) Cikgu Hasnan bin Haji Kahan (Poster) Nurathirah Salihah binti Haji Mohd Salleh (Registration and E-certificate) Suzie Katherine Ali Hassan (Registration and E-certificate) Noorul Alwana binti Sanny (Registration and E-certificate)

#### Logistics

Mazlena binti Matali Aswiradi bin Ahmad Rizan bin Amit Pengiran Mohd Fuad bin Pengiran Haji Mohd Sabri

#### Technical and IT Support

Asmad bin Haji Juna Mohamad Rudy bin Hj Awang Hassim Haji Shamdi bin Haji Mohammad Lai Kuan Hai Mohd Eddy bin Haji Sabli

#### Zoom Programme Managers

Dr Lim Mei Ann (Lead) Dr Shirley Huan Fang Lee Siti Nuratikah binti Zaini Maziah binti Masli

#### Emcee

Dr Deeni Rudita bin Idris

## CONTACT US

#### PENGIRAN ANAK PUTERI RASHIDAH SA'ADATUL BOLKIAH INSTITUTE OF HEALTH SCIENCES UNIVERSITI BRUNEI DARUSSALAM Jalan Tungku Link, BE1410 Negara Brunei Darussalam

Tel: 2463001 Ext 2202/2206/2266 Fax: 2461081

Assistant registrar: office.ihs@ubd.edu.bn MIB Medical Sciences Conference Secretariat: mib.ihs@ubd.edu.bn

> Instagram: ihs\_ubd Facebook: PAPRSB Institute of Health Sciences, UBD PAPRSB IHS Website: ihs.ubd.edu.bn



