PROCEEDING BOOK

THE 13th JAKARTA MEETING ON MEDICAL EDUCATION

Envisioning the future of medical education: Evolution or revolution?

23rd-24th October 2021

Department of Medical Education
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ISBN: 978-623-93484-4-1

Publisher
Departement of Medical Education
Faculty of Medicine, Universitas Indonesia
Jalan Salemba Raya no. 6, Jakarta Pusat
Phone: 021-3901814

Chairperson Message

Greeting from Jakarta.

> **Many ideas grow better when transplanted into another mind than the one where they sprang up.**
> (Oliver Wendell Holmes, American physician & writer)

It was November 2008, when Department of Medical Education Faculty of Medicine Universitas Indonesia initiate the first Jakarta Meeting on Medical Education (JAKMED). Since the first, JAKMED has been intended to become an annual melting pot for everyone, not only for medical and health professions educators striving for the latest and best evidence in this subject area, but also for all medical and health professions teachers- basic science and clinical teachers, program directors, as well as medical and health professions residents and students, to share idea and collaborate. From time to time, we are proud to have witnessed the quality improvement of the research being submitted to JAKMED.

Last year, due to COVID-19 pandemic situation we decided to postpone JAKMED 2020. However, as disruptions were pushed rapidly, medical and health professions education have been forced to adapt, and so do we. We are proudly presenting this year first full virtual JAKMED with the main goal of medical and health education that remains the same: to develop the next generation of professional health practitioners. In this year meeting, we are going to explore not only the present changes due to the pandemic but also the future of medical and health professions education following this pandemic. The theme of this year's conference will be: "**Envisioning the future of medical education: evolution or revolution?**"

We are going to discuss various topics aligned with the theme, from how research in medical education would play roles in shaping future medical education, to envisioning the future of medical education itself. All seven workshops of this year JAKMED are also strongly related to the future of medical education, from the skills teaching which all of us feel how challenges it is with the current situation, to portfolio assessment that we feel more in needs after this pandemic,

about student motivation as a complex soft skills that needs to be maintained despite the lack of face to face meeting, leadership approaches during changes, digitally transformed faculty development to prepare our faculty members in facing these rapid changes, and clinical teaching and learning. We are also going to discuss a very fresh topic in Indonesian higher education system, which was Kampus Merdeka in our panel discussion session.

We are very delighted and humbled to be able to invite our honorable speakers from literally across the world, thanks to the pandemic that made this a lot easier: Australia, the United Kingdom, the Netherlands, the United States of America, Canada, Malaysia, Singapore, and also from all parts of Indonesia. We would like to welcome all participants from all over Indonesia and also from our neighboring South East Asian Countries. We hope that JAKMED will provide all participants to share experiences and learn from each other, initiate new ideas and innovations.

In this opportunity, we would also like to thank the deanery of FMUI for continuously supporting JAKMED, faculty members of FMUI, especially faculty members from Department of Medical Education. We are grateful, respect, and admire our senior member who initiate medical education and stay with us to grow it even further and pray for our late seniors and colleagues.

Last but not least we are proudly launch a set of four references book on fundamental of medical education. We do hope our effort could contribute to advancement of medical education. Above all, on behalf of the Organizing Committee, I would like to warmly welcome you to our meeting, the 13th Jakarta Meeting on Medical Education. Hope you enjoy the conference and see you.

Sincerely yours,
Dr. dr. Rita Mustika, M.Epid
Chairperson of the 13th Jakarta Meeting on Medical Education 2021

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Conference Schedule

Saturday, 23rd October 2021

TIME	SESSION NAME	RESOURCE PERSONS
09.00 - 09.30 (UTC+7)	Opening ceremony	
09.30 - 10.15 (UTC+7)	**Keynote speech:** The role of medical education research in shaping our thoughts on the future scenario of medical education	Speaker: Lambert Schuwirth Moderator: Dwiana Ocviyanti
10.30 - 12.00 (UTC+7)	Free paper presentation	
13.00 - 15.00 (UTC+7)	Plenary session: Future of medical education	Speaker: Trudie Roberts Moderator: Theddeus OH Prasetyono
15.30 - 17.30 (UTC+7)	**Parallel workshops** **Workshop 1** Instructional Design for Complex Skills Teaching: The 4C/ID Approach	Jeroen van Merriënboer, Astrid Pratidina Susilo, Ardi Findyartini
	Workshop 2 How to develop assessment portfolio	Saiful Bahri Yusoff, Diantha Soemantri
	Workshop 3 Finding your why: Perspectives of self-determination theory**	Rashmi Kusurkar,
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Sunday, 24th October 2021

TIME	SESSION NAME	RESOURCE PERSONS
08.00 - 10.00 (UTC+7)	**Parallel workshops** **Workshop 5** Digital transformation of faculty development: Beyond technology	Yvonne Steinert, Ardi Findyartini
	Workshop 6 Clinical teachers: How to make students learn in clinical settings?	Subha Ramani, Rita Mustika
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10.00 - 11.30 (UTC+7)	**Panel discussions:** "*Kampus Merdeka*", adopting the philosophy of personalized learning in medical and health professions education	Speakers: Vishna Devi Nadarajah, Gandes Retno Rahayu, Fona Qorina Moderator: Diantha Soemantri
11.30 - 12.00 (UTC+7)	Closing ceremony	

** Workshop is open for health professions students

Keynote Speech

Saturday,
23rd October 2021
09.30 - 10.15 (UTC+7)

Speaker:
Lambert Schuwirth

Moderator:
Dwiana Ocviyanti

The role of medical education research in shaping our thoughts on the future scenario of medical education

CURRICULUM VITAE

Lambert Schuwirth

Lambert Schuwirth obtained his MD from Maastricht University. In 1991, he joined the Department of Educational Development and Research there, taking up various roles in student assessment: Chairman of the Inter-university and the Local Progress Test Review Committee, the OSCE Review Committee and the Case-based Testing Committee. Since the early 2000s, he has been Chair of the overall Taskforce on Assessment. He has been advisor on assessment to medical colleges in the Netherlands and the UK. In 2010, he chaired an international consensus group on educational research, the results of which were published in Medical Teacher. Since 2007, he has been a full-professor for Innovative Assessment at Maastricht University – currently as Adjunct. In 2011, he was made a Strategic Professor for Medical Education at Flinders University in Adelaide, Australia and is also the Chair of the Flinders University Prideaux Discipline of Clinical Education.

Dwiana Ocviyanti

Dwiyana Ocviyanti is currently a vice dean of Faculty of Medicine Universitas Indonesia. She graduated as medical doctor from FMUI in 1986 and graduated as an Obstetricians and Gynaecologist from FMUI in 1995. She obtained her PhD program in the field of Clinical Epidemiology from Faculty of Public Health Universitas Indonesia in 2006. She has worked as an educational staff in Department of Obstetrics and Gynaecology FMUI-RSCM since 1995. She was appointed as educational coordinator and head of educational program of Obstetricians and Gynecologist in FMUI-RSCM in 2009-2017. She has been appointed as Vice President of The Indonesian College of Obstetrics and Gynecologist since 2016, and as President of the Indonesian Society of Cervical Pathology and Colposcopy which is a member of The International Federation of Cervical Pathology and Colposcopy since 2013. She has been involved in

researches with the main focus in cervical cancer prevention in low resource setting and research in gynecology infection.

ABSTRACT

Almost invariably, education is an important revenue stream for medical schools. So, it is important that medical schools and ensure that their education is of high-quality and remains up-to-date. As every business knows, research and development into quality of what they produce is essential. So, the case in medical education research in general can easily be made, but that's not enough. Medical education research has to be of high quality itself to be able to support high-quality education. But this being said, conducting high-quality medical education research is not easy. Typically, this research requires agility in ontology and epistemology, theoretical frameworks and methodologies. Careful choices have to be made to avoid misalignment between research questions, methods, findings and conclusions. So, what determines quality of research and how does it differ from other domains of research, especially clinical research? This presentation will cover why medical education research is important, the role of medical education research to inform practice, and some common misconceptions that need to be avoided.

Plennary Session

Future of medical education: Producing a 21st century doctor

Saturday,
23rd October 2021
13.00 - 15.00 (UTC+7)

Speaker:
Trudie Roberts

Moderator:
Theddeus OH Prasetyono

CURRICULUM VITAE

Trudie Roberts

Professor Roberts graduated in medicine from Manchester. In 2000 she was appointed Professor of Medical Education at the University of Leeds and was awarded a National Teaching Fellowship in 2006. Professor Roberts has served as a council member of the GMC and RCP London and Chair of the Association for the Study of Medical Education and also previously a Censor for the RCP London. She was President of the Association for Medical Education in Europe until August 2019 and is an education board member for the RCPS Glasgow.

Professor Roberts has been involved in technology and learning in medicine since 2007. She is particularly interested in the personalisation of education and the use of student learning analytics to support this. Professor Roberts was awarded the 2017 Asia Pacific Conference MILES Award for her contributions to medical education and academic medicine and an honorary doctorate in Medical Education by the International Medical University in Kuala Lumpur. In 2018/19 she was part of the Topol review on the educational implications of the increasing influence of digital technologies on healthcare delivery.

Theddeus OH Prasetyono

Theddeus O.H. Prasetyono, M.D., PhD. is a Hand and Microsurgery Consultant in Plastic Surgery, Cipto Mangunkusumo Hospital/ Universitas Indonesia. He is also the chairman of ICTEC (Indonesian Clinical Training and Education Center) in the same hospital and university. Dr. Prasetyono did his training in plastic surgery at the Universitas Indonesia. He took his fellowship training in Reconstructive Microsurgery and Hand and Microsurgery in the United States. His main area of interest and research are in the field of non-tourniquet technique of hand surgery and flap surgery, besides vascular anomaly, aesthetic surgery, and training & education.

Currently, he is an active member and official bearer of several national and international organizations, such as Indonesian Society for Surgery of the Hand, OSAPS (Oriental Society of Aesthetic Plastic Surgery), and ISAPS (International Society of Aesthetic Plastic Surgery). He is the founding member of ASBPRS (Asian Society of Breast Plastic Reconstructive Surgeons). Just recently he joined the Board of Directors of Rhinoplasty Society of Asia. He has published numerous papers in scientific journals, mostly in hand surgery; and also written books. In addition, he is also listed as an editor and reviewer for several national and international journals, including Hand Surgery, APS (Archives of Plastic Surgery), Aesthetic Plastic Surgery, Arch Craniofacial Surgery, Journal of Surgical Research, etc.

He actively participates in various seminars, trainings, and scientific meetings, both as participants and speakers. He also has long years of experiences in organizing international events as well. Among those academic trips, they include visiting professorship to Asan Medical Center (Department of Orthopedic), Korea, 2012; twice to Kaohsiung Medical University (Department of Plastic Surgery, 2011 & 2013); Soonchunhyang University (Department of Plastic Surgery, College of Medicine), Korea 2015; Department of Surgery (Division of Plastic Surgery), College of Medicine, Philippine General Hospital, Manila, Philippine, 2019; Grigori T. Popa University (Department of Plastic Surgery)/ Institul Regional de Oncologie, Iaśi, Romania, 2019; Department of Orthopaedics Saiseikai Otaru Hospital/ Sapporo Medical University, Japan. Being an External Examiner at the MS (Plastic Surgery) Program Reconstructive Sciences Unit USM, Malaysia was part of his passion in training & education. Dr. Prasetyono has published 69 papers (41 in international journals indexed by Pubmed and Scopus) and 22 books and chapters.

ABSTRACT

Although we continue to train our students in performing clinical skills which have been around for centuries; the way we will practice medicine in the future will be very different than how we have done this in the past. The pace of change will be even faster than we previously anticipated because of the Covid pandemic. In this talk I will highlight the revolutionary influence that technology is having on healthcare delivery and why we need a similar revolution in what clinical skills we need to teach our students to equip them to provide the best medical care in the future.

Panel Discussions

Sunday,
24th October 2021
10.00 - 11.30 (UTC+7)

Speaker:
Vishna Devi Nadarajah
Gandes Retno Rahayu
Fona Qorina

Moderator:
Diantha Soemantri

"*Kampus Merdeka*", adopting the philosophy of personalized learning in medical and health professions education

CURRICULUM VITAE

Vishna Devi Nadarajah

Professor Vishna is an experienced medical educator and biochemist at the International Medical University in Kuala Lumpur. A graduate of 3 universities across 3 countries, she values diversity as a strength in any institution. She leads the educational strategies, new programme development and international partnerships at IMU as Pro Vice Chancellor for Education and Institutional Development. She is very fortunate to work with a collaborative, committed and talented multidisciplinary team at IMU, and would like to emphasise that it's the values of its people that will carry forward an institution during this unprecedented time. She has over 20 years of teaching experience in the medical, dentistry and pharmacy education. She has published and presented research papers in both biomedical sciences and medical education, supervises research students and reviews for indexed and international journals. Her areas of research in health professions education is in Faculty development, Assessment and Innovative Teaching Learning methods. Prof Vishna has shared her experience and expertise in health professionals education via invitations to speak at conferences, conducting faculty development workshops and collaborative research, appreciating that she has also learnt very much from these collaborative sessions with other educators.

Gandes Retno Rahayu

Prof. Gandes currently serves as the Vice Dean for Academic and Student Affairs at Universitas Gadjah Mada (UGM) Faculty of Medicine. Before her appointment as Vice Dean, she was Head of the Department of Medical Education and DIrector of the Master Program in Medical Education. From 2010 until 2016, she was selected to serve as an executive committee member for the LINQED international educational network, based in Belgium.

After completing her Medical Doctor degree at UGM in 1997, Prof. Gandes earned her Master degree in 2001, graduating with distinction from the Center for Medical Education, University of Dundee, Scotland, UK. She later earned her PhD in Medical Education from the same institution. Prof. Gandes began her career in Medical Education as a lecturer and went on to become the head of the Committee of Student Assessment at Faculty of Medicine UGM. She also served as Chair in the division of Examination Development, National Committee of Competency Examination for Indonesian Medical Students.

Prof. Gandes speaks at hundreds of national seminars, workshops, and conferences. In 2008, she was awarded an Endeavour Executive Fellowhip from the Government of Australia. She is a 2013 Fellow of the FAIMER Institute and a member of the editorial board of the Indonesian Journal of Medical Education. She has supervised and served as examiner for numerous Master and PhD theses.

Fona Qorina

Fona is a final-year medical student who is currently doing her clinical clerkship at the Faculty of Medicine University of Indonesia-Cipto Mangunkusumo National General Hospital. She graduated as a Bachelor of Medicine with cum laude honor. She has a strong passion for medical education, global health, and cardiovascular science. Throughout her studies, she has been involved in several organizations, community empowerment, and scientific competitions, for which she was awarded The Most Outstanding Student III in Activist Category. She had experience studying abroad during Half Minor Heart and Blood Vessels at Leiden University Medical Center in 2019 and has successfully chosen as a scholarship awardee to participate in Revolutions in Biomedicine Summer School at Imperial College London this year. She aspires to be a translational scientist who combines clinical, and research works. Her research has been published in 7 international papers.

Diantha Soemantri

Diantha Soemantri, MD, MMedEd, PhD is an associate professor in Department of Medical Education, Faculty of Medicine Universitas Indonesia. graduated as a medical doctor from Faculty of Medicine Universitas Indonesia in 2005, acquired MMedEd title from University of Dundee in 2007 and PhD in the same field from University of Melbourne in 2013. She is now the head of Master in Medical Education Program in Universitas Indonesia and also responsible for the multi- and interprofessional curriculum of Health Sciences Cluster. Since 2018, she is appointed as the vice director of medical education of the Indonesian Medical Education and Research Institute (IMERI). Her research interests are student assessment, reflection and feedback, interprofessional education and collaborative practice, and professionalism development.

ABSTRACT

"*Kampus Merdeka*" (Campus of Freedom) is the latest program by the Ministry of Education, Research and Technology of the Republic of Indonesia. One of the premises underlying this program is the importance of aligning the graduates' competencies with the needs of the employers and society. Increased number of elective courses, internship programs in the workplace and involvement of

practitioners, either from the governmental or private sector, as guest lecturers and curriculum developers, are among the highlights of this program.

The Kampus Merdeka program is to be adopted and implemented by all higher education institutions, and health sciences or professions education are exempted from the policy. However, the questions remain whether the philosophy of Kampus Merdeka can be applied, or has been applied, given there are quite a number of elective courses in many medical schools and also student exchange programs. And to what extent should this program (or the philosophy underpins it) be implemented in medical and health professions education, and in what format. The Kampus Merdeka program, or some of it, may still be relevant for medical and health professions education, especially in equipping students with future skills for example teamwork skills, communication and interpersonal skills, technology and data literacy, and many more. The Kampus Merdeka may provide students with opportunities to broaden their knowledge and skills, depending on their needs and interest, through elective and exchange programs.

Personalized learning is one the learning theories that builds the Kampus Merdeka program, aside from other theories such as experiential learning. Therefore, the panel discussion will discuss and explore how personalized learning be implemented in the medical and health professions education. The first speaker, Professor Vishna Devi Nadarajah from International Medical University, Malaysia will share her expertise and the institution's experience in organizing multiple international clerkship sites for their medical students and how it can be sustainable. The second speaker, Professor Gandes Retno Rahayu from Universitas Gadjah Mada, Indonesia will provide her point of views as a medical educator of how Indonesian medical schools can develop and run various programs/courses to implement personalized learning. Last but not least, the panel discussion will also include the current medical student of Universitas Indonesia, Fona Qorina, to share her unique student's perspectives and experiences on this matter. The panel discussion will be moderated by Diantha Soemantri who will lead the panel and trigger rich discussion.

Workshops

Saturday,
23rd October 2021
15.30 - 17.30 (UTC+7)

Facillitator:
Jeroen van Merriënboer
Astrid Pratidina Susilo
Ardi Findyartini

Workshop 1
Instructional Design for Complex Skills Teaching: The 4C/ID Approach

CURRICULUM VITAE

Jeroen van Merriënboer

Jeroen van Merriënboer is full Professor of Learning and Instruction in the Department of Educational Development of Research and in the School of Health Profession Education (SHE) at Maastricht University, the Netherlands. He has been trained as an experimental psychologist at the VU University Amsterdam and received a PhD in Educational Sciences from the University of Twente (1990). His main area of expertise is learning and instruction in the health professions, in particular instructional design and the use of new digital media in innovative learning environments. He has published widely on cognitive load theory, four-component instructional design (4C/ID, see www.4cid.org), and lifelong learning in the professions. He holds numerous academic awards for his publications and his international contributions. His books, “Training Complex Cognitive Skills and Ten Steps to Complex Learning”, had a major impact on the field of instructional design and have been translated in several languages. He published over 400 articles and book chapters with a Hirsch-index of 88 (see profile on Google Scholar), and his publications received more than 43.000 citations. Almost 50 PhD students completed their theses under his supervision.

Astrid Pratidina Susilo

Astrid Pratidina Susilo is a researcher and practitioner in health professions education and public health, and an anesthesiologist. She studied medicine at Universitas Airlangga, Master of Public Health and Ph.D of Health Professions Education at Maastricht University the Netherlands, and did her residency in Anesthesiology and Intensive Care in Universitas Indonesia. Astrid has been teaching in the Faculty of Medicine and Faculty of Pharmacy Universitas Surabaya and practicing as an anesthesiologist in Abdul Wahab Sjahranie General Hospital in Samarinda. Her topics of research interest are communication skills, patient safety, interprofessional collaboration and education, and pain learning. She

used 4C/ID for her dissertation and has been advocating the principles of 4C/ID through different articles, workshops, and her educational works. She has also published articles in national and international journals and written several books in research methods and health professions education.

Ardi Findyartini

dr. Ardi Findyartini, PhD is an associate professor and currently the Head of Department of Medical Education, Faculty of Medicine, Universitas Indonesia. She graduated as medical doctor from FMUI in 2002 and completed her PhD in medical education from Melbourne Medical School, Faculty of Medicine Dentistry and Health Sciences, University of Melbourne in 2012. She is also the Head of Medical Education Unit of FMUI and the Head of Medical Education Center Cluster at IMERI, FMUI. She has been actively involved in the curriculum development of undergraduate and postgraduate medical programmes and in conducting faculty development programs in FMUI and at the national and international levels. She has been publishing scholarly works and contributing in the review process in national and international peer reviewed journals and conferences. Her research interests are in the curriculum development, interprofessional education and interprofessional collaborative practice, professional development, clinical reasoning, student's adaptation and transition and socio-cultural related issues in medical and health professions education.

ABSTRACT

Background

The competence-based curriculum in health professional education requires an instructional design that is spiral, integrated, and able to facilitate the longitudinal development of students' competences from simple to complex professional tasks. Teachers are often struggling to develop such curricula. Topics, for example diseases in medicine, are often divided into lecture sessions and students get assignments in the end of the course. Different domains of learning, so called 'hard skills' and 'soft skills,' are introduced separately. This approach is fragmented. Consequently, students will face challenges in the transfer and integration of their knowledge and skills from the schools to the professional tasks in the real world.

4C/ID (Four Components Instructional Design) can be used to structure courses to improve students learning in health profession education, including the teaching of complex skills (e.g., physical examination, clinical reasoning, visual diagnosis etc.) in the simulation based and real task environments. The main assumption of 4C/ID is that good education is built from four interrelated components. The first component is **learning tasks**, which provide a backbone of the educational program. The learning tasks are whole-tasks which are based on professional authentic tasks. The second component is **supportive information** that helps students to perform the problem-solving and reasoning aspects of the learning tasks. The third is **procedural information** that helps them perform the routine aspects of learning tasks. Finally, the fourth component is called **part-task practice**. Part-task practice might be necessary to provide additional practice for the routine aspects of learning tasks.

This workshop aims to provide basic insights on how to use 4C/ID to develop courses and learning trajectories in health professions education. In-line with the principles of 4C/ID, this workshop will also give learning tasks to the participants for developing their own courses using 4C/ID. Participants are encouraged to bring their own project beforehand, develop their project after listening to lectures, and obtain feedback from peers and facilitators.

Objectives

By the end of the workshop, participants will be able to:

1. Explain the basic principles in 4C/ID
2. Describe the application of 4C/ID in an example of course design
3. Have an experience to develop a course based on 4C/ID approach

Scope of discussion

1. The role of 4C/ID in learning complex skills in health professions education
2. The basic principles of 4C/ID
3. Application of 4C/ID in a course design

Activities (120')

Time	Session
10 mins	Introduction, reflection, first polls
30 mins	Lecture on introduction on 4C/ID
15 mins	Lecture on example of 4C/ID
5 mins	Second polls & assignments
30 mins	Worsking on projects in small groups
20 mins	Presentation of projects
10 mins	Q and A, take home messages

Workshop participants

A total of 30 participants (max) is expected. Participants: teachers, faculty leaders, curriculum development staff, course designers.

Workshop facilitators

1. Jeroen van Merriënboer
2. Astrid Pratidina Susilo
3. Ardi Findyartini

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Saturday,
23rd October 2021
15.30 - 17.30 (UTC+7)

Facillitator:
Saiful Bahri Yusoff
Diantha Soemantri

Workshop 2
How to develop assessment portfolio

CURRICULUM VITAE

Saiful Bahri Yusoff

He is Associate Professor and Head, Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia. He is a medical doctor with Master of Science and PhD in Medical Education. He is the Editor in Chief of Education in Medicine Journal, the Regional Director of East Asia of International Society for Emotional Intelligence, Fellow of National Higher Education Research Institute, Fellow of Centre for Development of Academic Excellence and a Visiting Professor at Universitas Indonesia. His areas of expertise are well-being in medical and higher education, curriculum, assessment, development and validation of measurement tools, emotional intelligence, student admission, educational psychology, and psychometric. He has published more than 200 publications and served as a reviewer to various reputable journals. He has been invited as a speaker for many conferences, seminars, and workshops at national and international levels. He is the recipient of many awards such as the Gold Medal for Reimagine Education Teaching Delivery Award 2016, Best of the Best Award and Gold Medal for International Innovative Practices in Higher Education 2016, Excellent Educator Award in 2016, International Leadership Award in 2017, Gold Medal Award for Innovative Practices in Higher Education 2014 and Ronald Harden Innovation in Medical Education Award in 2013. He completed a one-year medical education editorial internship program provided by Association for Study in Medical Education (ASME) and was awarded the executive education certificate on the Financial Analysis for Non-Financial Managers from INSEAD.

Diantha Soemantri

Diantha Soemantri, MD, MMedEd, PhD is an associate professor in Department of Medical Education, Faculty of Medicine Universitas Indonesia. graduated as a medical doctor from Faculty of Medicine Universitas Indonesia in 2005, acquired MMedEd title from University of Dundee in 2007 and PhD in the same field from University of Melbourne in 2013. She is now the head of Master in Medical Education Program in Universitas Indonesia and also responsible for the multi- and interprofessional curriculum of Health Sciences Cluster. Since 2018, she is appointed as the vice director of medical education of the Indonesian Medical Education and Research Institute (IMERI). Her research interests are student assessment, reflection and feedback, interprofessional education and collaborative practice, and professionalism development.

ABSTRACT

Background

A portfolio is a systematic collection of student work that represents student activities, accomplishments, and achievements over a specific period of time in one or more areas of the curriculum. Authentic assessment, such as portfolio assessment, has the advantage of providing stakeholders with directly observable products and understandable evidence concerning students'

performance. Developing an authentic assessment rubric to assess students' competency through portfolios is an essential evidence to support its validity. This workshop will guide participants to define criteria to be used in the assessment of portfolios, create appropriate assessment descriptors based on the criteria, and reflect on the assessment process through portfolios.

Objectives

At the end of the workshop, the participants would be able to:

1. Explain the principles of assessment
2. Explain the principle of constructive alignment in assessment
3. Explain the definition, purpose and the validity of assessment of portfolio
4. Create a simple assessment rubric for a simple task

Scope of discussion

1. Principles of assessment
2. Principles of constructive alignment in assessment
3. Principles of portfolio assessment (definition, purpose, validity)
4. Assessment criteria and descriptors
5. Development of assessment rubric

Activities

The 2-hour workshop will be divided into several activities. First part of the workshop will be an interactive lecture to strengthen the understanding of the basics of assessment and portfolio assessment. The large portion of the workshop will be used for the participants to create a simple assessment rubric in small groups. Results of the group work will be presented and discussed and the workshop will be closed with a reflection upon the principles and practices of portfolio assessment.

Workshop participants

The expected number of participants for the workshop is 30 participants. The workshop is suitable for intermediate level of participants and especially those who will embark on the assessment of portfolio.

Workshop facilitators

1. Muhammad Saiful Bahri Yusoff
2. Diantha Soemantri

References

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Saturday,
23rd October 2021
15.30 - 17.30 (UTC+7)

Facillitator:
Rashmi Kusurkar
Estivana Felaza

Workshop 3
Finding your why: Perspectives of self-determination theory

CURRICULUM VITAE

Rashmi Kusurkar

Rashmi is medical doctor with specialization in physiology from Mumbai, India. She was involved in full-time teaching and conducted faculty development trainings. In 2008 Rashmi moved to the Netherlands and obtained her PhD on "Motivation in Medical Students".

Rashmi has been instrumental in setting up Research in Education at her institute and currently works as a Research Programme Leader at Research in Education at Faculty of Medicine Vrije Universiteit Amsterdam. She conducts direct supervision of 11 PhD students; 6 PhD students have graduated under her supervision. She has been able to secure external funding (more than 1 million Euros) for research. Her vison for education is to develop "students for life".

Her most significant achievements include being awarded the "NVMO Best PhD Thesis Prize 2014" in medical education, being welcomed as Faculty on Self-Determination Theory, being the Chief Organizer of the 7th International Self-determination Theory Conference, and being chosen for the Fellowship of Karolinska Institute Prize for Research In Medical Education 2019.

Rashmi is currently also working as: Visiting Professor at University of Indonesia, Associate Professor (Status Only) at the University of Toronto, Canada, and member of the Executive Committee of the Association of Medical Education in Europe.

ABSTRACT

Motivation is a force that drives student learning and academic success. Motivation is dynamic and can be enhanced through certain teaching-learning practices and arrangements in the curriculum. This workshop will be conducted by Dr Rashmi Kusurkar who has completed her PhD on student motivation. The main format of the workshop will be interaction between the participants through pre-formulated activities.

Objectives

At the end of the workshop, the participants would be able to understand:

1. What is motivation
2. Self-determination theory of motivation and its principles
3. Why motivation is important in learning and academic success
4. How factors in the learning environment can influence student motivation
5. How can student motivation be enhanced by employing teaching-learning practices

Workshop participants

The expected number of participants for the workshop is 30 participants.

References

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Saturday,
23rd October 2021
15.30 - 17.30 (UTC+7)

Facillitator:
Albert Scherpbier
Rita Mustika

Workshop 4
Leading through change: How to tackle pitfalls and challenges in medical school

CURRICULUM VITAE

Albert Scherpbier
Professor Scherpbier is Professor of Quality Promotion in Medical Education and was Dean of the Faculty of Health, Medicine and Life Sciences and Vice Chair of Maastricht University Medical Centre from May 2011 till June 2020.

His key interests in medical education are quality assurance, professionalisation of medical education, career prospects for medical teachers, involvement of medical students in improving the quality of education, and medical education research. He has published extensively on medical education research. He published more then 300 papers in international peer reviewed journals, 100 papers in national journals and around 70 chapters in books and conference proceedings.

He teaches courses on medical education research for the Maastricht School of Health Professions Education. He supervises national and international PhD students (more then 60 finished). He has been a consultant to medical schools in various countries, including Indonesia, Uganda, Nepal and Ghana.

He has been a driving force for curriculum innovation aimed at promoting integration of basic science and clinical science and teaching in realistic contexts. Professor Scherpbier is also involved in innovations in postgraduate specialist training especially accreditation. In 2008, “Scherpbier 1.0” was published, to convince the Ministry that we need a quality assurance system. In 2015 “ Scherpbier 2.0 “ was published to realise a more simple and less bureaucratic accreditation system. He is also involved in changing the role of Academic Health Centers in the region. “Research and innovation with and for a healthy region”.

He is CEO of Scannexus (a MRI facility with scanners up to 9.4) and chairman of INSCITE a big public private enterprise to stimulate biomedical and biobased developments.

Rita Mustika
dr. Rita Mustika, M.Epid is a senior lecturer of medical education Universitas Indonesia, serving as head of medical education collaboration cluster (MECC IMERI-UI). Under her leadership, MECC has piloting the collaboration model. Her other responsibilities include faculty development and professional formation curriculum. She’s also involved in national mentoring-coaching program. Recently, she explores humanistic climate in medical education for her PhD project.

The establishment of several new medical schools in Indonesia has been assisted under her coordination as head of partnership unit. She earned medical degree from Universitas Gadjah Mada, master of clinical epidemiology from UI,

received training in dermatology at Kobe University, and her doctorate degree from Universitas Indonesia.

ABSTRACT

Background

COVID-19 Pandemic has caused tremendous change in most aspect of life, including medical education (1,2). Even though in medicine, the first priority is directly toward the prevention and management of the disease itself, the process of nurturing physician for the future has never been this important as today. This past year, medical institution thrives to continue the medical education process despite the situation. The changes in curriculum, innovation on the usage of information technology to enhance learning and teaching methods were applied to ensure the student could keep learning and achieve their expected competencies as a medical doctor (2). The needs of professional physicians are increasing due to the prolonged course of this pandemic. Leadership plays an essential role in these processes. The leader has to manage this uncertain, volatile, and complex situation effectively (3). This workshop will conduct in step by step manner to engage participant with the real problems and discuss the way to manage the problem learning from the quality assurance perspective and the latest evidence on the leadership management in COVID-19 time.

Objectives

By the end of the workshop, participants will be able to:

1. Identify the profile and attribute of an ideal leader in the crisis situation?
2. Identify the skills needed to become those leaders
3. Develop the plan to become those leaders

Scope of discussion

1. What kind of leader that could lead in the crisis?
2. What skills needed to become those leader?
3. How are you going to become that leader?

Activities (120')

Time	Session
15 mins	Ice breaking & introduction
15 mins	Discussion: What kind of leader that could lead in the crisis and why?
20 mins	Interactive lecture 1: Leading through crisis (principles of leadership, steps to manage in difficult situation)
15 mins	Group work: Define the priority to manage in this crisis
20 mins	Interactive lecture 2: Attribute and skills needed to become a great leader in crisis situation
15 mins	Discussion: Identify personal attribute and skills needed for you to become a future leader
20 mins	Reflections & personal action plan

Workshop participants

A total of 30 participants (max) is expected. Participants: medical teacher, administrator/ leader/ manager of the medical institution

Workshop facilitators

1. Albert Scherpbier
2. Rita Mustika

References

1. Michelle Daniel, Morris Gordon, Madalena Patricio, Ahmad Hider, Cameron Pawlik, Rhea Bhagdev, Shoaib Ahmad, Sebastian Alston, Sophie Park, Teresa Pawlikowska, Eliot Rees, Andrea Jane Doyle, Mohan Pammi, Satid Thammasitboon, Mary Haas, William Peterson, Madelyn Lew, Deena Khamees, Maxwell Spadafore, Nicola Clarke & Jennifer Stojan (2021) An update on developments in medical education in response to the COVID-19 pandemic: A BEME scoping review: BEME Guide No. 64, Medical Teacher, 43:3, 253-271, DOI: 10.1080/0142159X.2020.1864310
2. Rose S (2020). Medical student education in the time of COVID-19. JAMA, 323 (21): 2131-2
3. Harris, A. (2020). COVID-19–school leadership in crisis. Journal of Professional Capital and Community.

Saturday,
24th October 2021
08.00 - 10.00 (UTC+7)

Facillitator:
Yvonne Steinert
Ardi Findyartini

Workshop 5
Digital transformation of faculty development: Beyond technology

CURRICULUM VITAE

Yvonne Steinert

Yvonne Steinert, Ph.D., a clinical psychologist and Professor of Family Medicine and Health Sciences Education, is the Richard and Sylvia Cruess Chair in Medical Education and the former Director of the Institute of Health Sciences Education in the Faculty of Medicine at McGill University. She is actively involved in undergraduate and postgraduate medical education, educational research, and the design and delivery of faculty development programs and activities. Her research interests focus on teaching and learning in the health professions, the impact of faculty development on the individual and the organization, professionalism and professional identity formation, and the interplay between culture and health professions education. She has written and presented extensively on topics related to faculty development and medical education and was recently named to the Order of Canada in recognition of her contributions to the advancement of pedagogical principles, faculty development, and new training approaches in Canadian medical education.

Ardi Findyartini

dr. Ardi Findyartini, PhD is an associate professor and currently the Head of Department of Medical Education, Faculty of Medicine, Universitas Indonesia. She graduated as medical doctor from FMUI in 2002 and completed her PhD in medical education from Melbourne Medical School, Faculty of Medicine Dentistry and Health Sciences, University of Melbourne in 2012. She is also the Head of Medical Education Unit of FMUI and the Head of Medical Education Center Cluster at IMERI, FMUI. She has been actively involved in the curriculum development of undergraduate and postgraduate medical programmes and in conducting faculty development programs in FMUI and at the national and international levels. She has been publishing scholarly works and contributing in the review process in national and international peer reviewed journals and conferences. Her research interests are in the curriculum development, interprofessional education and interprofessional collaborative practice, professional development, clinical reasoning, student's adaptation and transition and socio-cultural related issues in medical and health professions education.

ABSTRACT

Background

COVID-19 Pandemic has caused tremendous change in most aspect of life, Faculty or academic staff members are key in any curriculum development or transformation in medical and health professions education. Their roles in teaching are beyond giving information, transferring knowledge and skills, assessing students' performances and developing curricula. Staff members

also need to engage students more in their learning, become role models and participate in continuing professional development and lifelong learning processes. The unprecedented changes and momentum caused by the pandemic encourage further reflection on the roles of medical and health professions education teachers, especially in teaching. Educating future physicians and health professionals also requires a great deal of courage and resilience during this time. While the roles of faculty in teaching need further adaptation to support students in more virtual or hybrid learning environments, attempts to support the faculty in pivoting and adapting their teaching and providing the best possible education processes despite challenging situations are even more critical. The use of technology has been reinforced during the pandemic, and it should be considered in faculty development programs moving forward. To create agile and supportive environments for teachers to adapt optimally, however, needs further understanding on the teachers' core roles and diverse faculty development approaches. This workshop therefore aims to elaborate upon (or stimulate thinking about?) the digital transformation of faculty development by encouraging participants to reflect on their roles and their professional development.

Objectives

By the end of the workshop, participants will be able to:

1. Reflect on the teaching roles of medical and health professions education teachers for the new era;
2. Describe formal and informal approaches to faculty development based on the 4-quadrant framework (Steinert Y, 2014);
3. Plan the transformation of a FD approach (e.g. face-to-face, full online, hybrid) to enhance a specific teaching skill using the 4-quadrant framework.

Scope of discussion

1. The roles of medical and health professions education teachers
2. The impact of the current pandemic on teachers' roles and faculty development
3. The 4 quadrants of faculty development
4. Transforming faculty development programs

Activities (120')

Total 2 hours (1 hour & 45 minutes, with 15 minutes break)

1. Introduction and icebreaker (15 mins)
2. Interactive session: The roles of medical and health professions education teachers (15 mins)
3. Interactive session: 'How did you become medical and health professions education teachers?': Introducing the faculty development 4-quadrant framework (20 mins)
4. Break (10 mins)
5. Group exercise: Transforming a faculty development activity (breakout rooms; 30 mins)
6. Plenary: Transforming a faculty development program (20 mins)
7. Group reflections: What are the take-home messages of this workshop for you? (10 mins)

Workshop participants

A total of 30 participants (max) is expected. Participants: medical teacher, clinical teacher, faculty developer.

Workshop facilitators

Prof. Yvonne Steinert
A/Prof. Ardi Findyartini

References

1. Y. Steinert (ed.). Faculty Development in the Health Professions: A Focus on Research and Practice, Innovation and Change in Professional Education 11,DOI 10.1007/978-94-007-7612-8_1, © Springer Science Business Media Dordrecht 2014.
2. Harden RM & Crosby J. AMEE Guide No 20: The good teacher is more than a lecturer - the twelve roles of the teacher. Medical Teacher. 2000. 22(4):334-347.

Saturday,
24th October 2021
08.00 - 10.00 (UTC+7)

Facillitator:
Subha Ramani
Rita Mustika

Workshop 6
Clinical teachers: How to make students learn in clinical settings

CURRICULUM VITAE

Subha Ramani

Subha is a general internist and an educationalist at Brigham and Women's hospital and Harvard Medical School. She has completed extensive training in Medical/Health Professions Education including the Stanford Faculty Development Program, Harvard Macy programs, a Masters in Medical Education from the University of Dundee and a PhD in Health Professions Education from Maastricht University.

At Brigham and Women's Hospital, she serves as the Director for a yearlong Program for Research, Innovations and Scholarship for Department of Medicine faculty; Director of the Scholars in Medical Education pathway for the Internal Medicine Residency program; and Lead for Global Perspectives and Community for the Brigham Education Institute. She is also a Senior Faculty at the Harvard Macy Institute and Faculty for the PhD Programme at the MGH Institute for health professions.

Internationally, she serves as an AMEE Executive Board member; Chair of the AMEE Fellowship Committee; Visiting Professor at the University of Indonesia; and Honorary Professor of Medical Education at the University of Manchester, UK.

Her areas of research and scholarly interests include staff development, application of educational theory to practice, feedback culture, mentoring and qualitative research. She has several peer reviewed publications, book chapters and regularly organize and present plenaries, workshops and longitudinal courses.

Rita Mustika

dr. Rita Mustika, M.Epid is a senior lecturer of medical education Universitas Indonesia, serving as head of medical education collaboration cluster (MECC IMERI-UI). Under her leadership, MECC has piloting the collaboration model. Her other responsibilities include faculty development and professional formation curriculum. She's also involved in national mentoring-coaching program. Recently, she explores humanistic climate in medical education for her PhD project.

The establishment of several new medical schools in Indonesia has been assisted under her coordination as head of partnership unit. She earned medical degree from Universitas Gadjah Mada, master of clinical epidemiology from UI, received training in dermatology at Kobe University, and her doctorate degree from Universitas Indonesia.

ABSTRACT

Background

Learning in clinical setting is an essential part of the journey to become a professional physician. In the clinical setting, medical student learns through socialization process to gain competencies. The complex characteristics of clinical setting set challenges for teaching and learning in the clinical setting. The success of learning in the clinical setting highly influence by the ability of clinical teacher to provide conducive learning environment for the students to learn. Moreover, the advancement of medical education provide insight for clinical teacher to grow professionally as a teacher. In this short workshop we will discuss the attribute and skills needed for clinical teacher to make students learn in clinical teaching.

Objectives

By the end of the workshop, participants will be able to:

1. Define the conducive learning environment in clinical setting
2. Identify the attributes and skills needed for clinical teacher to support student's learning
3. Develop the plan to become a professional clinical teacher

Scope of discussion

1. What are the supporting components of student's learning in clinical setting?
2. What are the clinical teacher's attributes and skills needed to support student's learning in clinical setting?
3. How are you going to become a professional clinical teacher?

Activities (120')

Time	Session
15 mins	Ice breaking & introduction
30 mins	Interactive lecture 1: Teaching in the clinical setting
15 mins	Video appraisal: Teaching in the clinical setting
30 mins	Interactive lecture 2: Defining an excellent clinical teacher
20 mins	Group discussion: Evaluate clinical learning environment and skills needed to support students learning in your setting
20 mins	Reflections & personal action plan

Workshop participants

A total of 30 participants (max) is expected. Participants: clinical teacher, administrator/leader/manager of the medical institution.

Workshop facilitators

Subha Ramani & Rita Mustika

References

1. Ramani S & Leinster S (2008). AMEE Guide no 34: Teaching in The Clinical Environment. Med Teach; 30: 347-64
2. Burgess A, Digelle CV, Roberts C, Mellis C (2020). Key Tips for Teaching in The Clinical Setting. BMC Medical Education. 20 (Suppl 2): 463
3. Harper, B.D., Buchanan, A.O., Cramton, R.E., Gourishankar, A., King, M., Molas-Torreblanca, K., Patra, K.P., Pomeroy, B., Potisek, N.M., Seelbach, E. and Tomaszewski, J.L., 2020. Developing an effective inpatient learning climate. The clinical teacher, 17(4), pp.366-372.

Saturday,
24th October 2021
08.00 - 10.00 (UTC+7)

Facillitator:
Dujeepa Samarasekera
Estivana Felaza

Workshop 7
Clinical students: How to learn effectively in clinical settings?

CURRICULUM VITAE

Dujeepa Samarasekera

Dr. Dujeepa D. Samarasekera is the Director, Centre for Medical Education (CenMED), Yong Loo Lin School of Medicine and Senior Consultant at the Ministry of Health Singapore. He is a honorary Professor in Medical Education at Tzu Chi University Taiwan and Semey University Kazakhstan. He has been involved in curriculum development, quality assurance and accreditation and faculty development at both undergraduate and postgraduate level health professional courses. He is the Course Director of the Masters in Health Professions Education - Singapore and is the Chair Faculty Teaching Excellence Committee (FTEC) for Yong Loo Lin School of Medicine and Saw Swee Hock School of Public Health. In addition, he leads the School of Medicine Continuous Quality Improvement team at the deanery. He is the co-chair for faculty development in the residency programme and a member of the Undergraduate Curriculum Committee, Graduate Medical Education Committee, Faculty Assessment Committee and Curriculum Steering Committee at the School of Medicine and National University Health System. At MoH level, he is part of the Professional Training Assessments and Standards division. At the regional and international level, he is a member of the ASPIRE for Excellence panel at the European Association for Medical Education to evaluate medical schools that have achieved excellence in specific areas of faculty development, assessment etc. and Co-chair the Asia Pacific Scholar Network (APMENet) in medical education. He is the present President of the College of Clinician Educators at Academy of Medicine Singapore, President of the Western Pacific Association of Medical Education and an Executive Board Member of the World Federation of Medical Education. He serves on the editorial advisory boards of Annals of Academic Medicine Singapore, South East Asian Journal of Medical Education, Korean Journal of Medical Education, Journal of Educational Evaluation for Health Professions, BLDE Medical Journal, AMEE online journal MedEdPublish and Perspectives in Medical Education. He serves in many international medical education organisations and has published widely in peer-reviewed medical education journals as well as authored book chapters relating to Medical and Health Professional Education. He holds the fellowships of the Academy of Medicine Singapore, Academy of Medicine Malaysia, Academy of Medical Educators in the United Kingdom, Royal College of Physicians Edinburgh and the fellowship of Medical Educators Europe.

Estivana Felaza

Estivana Felaza is a lecturer at department of medical education FMUI since 2007. She graduated from FMUI as a medical doctor in 2004, and finished her master degree in medical education in 2011. She is currently pursuing her doctorate degree in FMUI. Her area of interests are in the field of teaching-learning, students support, and faculty development.

ABSTRACT

Background

As students enter clinical settings, they would experience learning that are enriched with professional value on how to develop their professional identity. Interaction in clinical settings characterized with many features that makes learning both very contextual and challenging. Students learn by interacting with their environment in clinical settings, and one of the most important interaction taking place is feedback from teachers.

Studies on feedback shows that when given and responded effectively, feedback are very beneficial for learning. Feedback helps students recognizing the strength and weaknesses in their performance, which would later lead them to plan strategies for improving themselves. In order to utilize feedback effectively, students need to comprehend how feedback are processed, identify factors that might hinder it, and recognize suitable tips they could apply in everyday practices.

Objectives

By the end of the workshop, participants will be able to:

1. Describe the concept and characteristics of clinical learning
2. Describe the role of feedback in clinical learning
3. Describe how feedback are processed in order to improve learning
4. Discuss suitable tips to process and utilize feedback effectively

Scope of discussion

1. Concept and characteristics of clinical learning
2. Role of feedback in clinical learning
3. How feedbacks are processed in order to improve learning
4. Tips and tricks to effectively utilize feedback

Activities (120')

Time	Session
10 mins	Ice breaking
10 mins	Introduction to the workshops
20 mins	Concept and characteritics of clinical learnig
20 mins	Role of feedback in clinical learning
20 mins	How feedbacks are processed in order to improve learning
20 mins	Group discussion: Tips and tricks to effectiverly utilize feedback
20 mins	Reflections and take home messages

Workshop participants

30 participants (divided into 4 groups).

Workshop facilitators

1. Dujeepa Samarasekera
2. Estivana Felaza

Reference:

1. Jug R, Jiang X, Bean SM. Giving and receiving effective feedback: a review article and how-to guide. Archives of Pathology and Laboratory Medicine 2019;143:244-30
2. Garino A. Ready, willing, and able: a model to explain successful use of feedback. Advances in Health Science Education 2020;25: 337-61

Free Paper Presentation

Saturday,
23rd October 2021
10.30 - 12.00 (UTC+7)

Oral Presentation

ORAL PRESENTATION GROUP 1

OA-101 **Learning model to achieve clinical reasoning competency using technology enhanced learning in neurology clinical rotation: An exploratory study**

Ida Ratna Nurhidayati[1], Ardi Findyartini[2], Sri Linuwih Menaldi[2]
[1] Master Program in Medical Education, Faculty of Medicine Universitas Indonesia
[2] Department of Medical Education, Faculty of Medicine Universitas Indonesia

Background: COVID-19 pandemic has encouraged tremendous adaptation of the clinical clerkships, including learning activities regarding clinical reasoning in the neurology clinical rotation. Technology enhanced learning may facilitate the continuity of clinical clerkships despite some limitations. A lot of platforms and applications can be used for this although we have to deal with ethical, legal, social issues, cybersecurity, and infrastructure.

Aim of study: This present study aims to explore a learning model to achieve clinical reasoning competency using technology enhanced learning in the neurology clinical rotation by identifying the contributive factors and learning strategies.

Method: This study used a qualitative method with a case study design. This study was held in the Faculty of Medicine YARSI University and its two teaching hospitals. Data collection was conducted in three steps: document analysis, focus group discussions with medical students, and in-depth interviews with clinical teachers. All transcribed data were analysed with a thematic analysis using SCAT approach.

Results: Three focus group discussions involving eight medical students and twenty graduated medical students and five in-depth interviews involving

five neurologists were completed. Two themes were revealed which are the contributive factors and learning strategies. This study found six factors that can influence the learning model: the quantity and quality of teacher interactions, student's motivation and skills in learning and technology, the variety and number of patients in teaching hospitals, the teaching hospital's quality and quantity of facilities and infrastructures for service and education, the design of clinical rotation's program, and the last is learning adaptation during pandemic. Several learning strategies using technology for clinical reasoning skills were also identified: blended learning, online logbook, telemedicine, collaborative online learning between teaching hospitals, and learning videos.

Conclusion: Learning model explored from this study is a learning model for clinical reasoning skills competency in neurology that can be implemented in a limited resource setting. Factors from the perspectives of student, clinical teacher, school of medicine/teaching hospital, and the technical aspects should be considered for the implementation.

OA-102 Global health education in medical schools: A scooping review

Muhammad Athallah Arsyaf [1], Garry Soloan1, Nadia Greviana[2,3], Ardi Findyartini[2,3]

[1] Undergraduate Program in Medicine, Faculty of Medicine, Universitas Indonesia,

[2] Medical Education Centre, Indonesian Medical Education and Research Institute (IMERI), Faculty of Medicine, Universitas Indonesia

[3] Department of Medical Education, Faculty of Medicine, Universitas Indonesia

Background: Questions surrounding transnational health disputes and the role of international organizations highlights the importance of acquiring professional skills to comprehend medicine within a multi-dimensional and rapidly evolving world, especially following the coronavirus disease 2019 pandemic. In the last decade, Global Health Education (GHE) has been utilized by North American and European medical schools to provide medical students with the necessary training on this aspect. Conversely, its development in medical institutions from the Asia-Pacific region have been fairly scarce and rarely reported.

Aim of study: The aim of this paper is to review the existing GHE programs offered by individual institutions, while simultaneously assessing national-level studies on its implementation across different regions of the world. By establishing a clear birds-eye view of the literature, we expect to widen our knowledge on GHE and guide its future curricular developments.

Method: Using a scoping review methodology, we systematically gathered a wide selection of studies from six databases and obtained data on GHE curricular designs (e.g., learning outcomes, topics) and its implementation (e.g., duration, deliverables) offered across different medical schools. Challenges and problems encountered within each program will also be analyzed. Collected details are then compared and contrasted to find necessary points of GHE within regional contexts.

Results and discussion: We have conducted scoping review processes and included at least 32 relevant articles to be analyzed further. Analysis of results will be completed by the end of August 2021. We expect to compare and contrast various GHE development and implementation in different medical schools from diverse regions. We will also attempt to highlight the core concepts and key processes of GHE curriculum and discuss the influence contextual factors might have on its inclusion.

Conclusion: The scoping review is expected to report the current curriculum and approach of GHE, in order to enrich GHE development in different medical schools across all regions of the world.

OA-103 Optimizing learning experience through understanding the effect of information density on memory: Evidence from a recognition memory test

Joel Wallenberg[1], Salsabila Nadhif Fadhilah[2]

[1] Institute of Neuroscience, University of Newcastle, United Kingdom

[2] Faculty of Medicine, International Class Undergraduate Program, Universitas Indonesia, Indonesia

Background: The transfer of information from teacher to student is an important part in medical education. It needs to be effective and easily understandable to optimize learning experience. A speaker can structure a phrase where the information are ordered smoothly with the information being dispersed across the phrase or clumped where the information is concentrated in just certain parts of the phrase. These differences of order in a phrase can affect the receiver's memory processing and retrieval ability of the information.

Aim of study: To identify the effect of different sequences of information on brain's memory recognition and retrieval ability

Method: 324 participants were tested using an online recognition memory test to evaluate their memory performance. The test consists of study and test phase. 150 words that consists of low, medium and high frequency words were chosen and assigned into clumped and smooth word list. The study phase reveal 75 words and participants were asked to memorize the words. The test phase shows 150 words and participants were asked to decide whether they have seen the words before and rate their confidence level. Memory performance were analyzed using curves and statistical analysis.

Results: The difference in word spreading affects participant's total memory performance and recollection. Participants with smooth word list has higher memory performance than the participants with clumped word list.

Conclusion: Smooth sequence is easier to process by the brain due to less of high informational words being clumped together that minimizes the loss of information when temporary memory failure happens. Implication of this study is to help improve learning process through better delivery of information with smooth sequence by the teacher to optimize student's ability to retain information to optimize learning experience.

OA-104 Interprofessional Education (IPE) perception and competencies in clinical rotation

Gita Sekar Prihanti[1], Diantha Soemantri[2], Ardi Findyartini[2]

[1] Faculty of Medicine University of Muhammadiyah Malang

[2] Faculty of Medicine Indonesia University

Background: Interprofessional Collaboration Practice (IPCP) has been proven to improve patient safety and the quality of health services. Interprofessional education (IPE) at the academic and clinical rotation is an important approach to equip medicine and health professsions with the collaborative competencies.

Aim of study: to examine the IPE perceptions and competencies of medical and health professions students before and after an IPE program in the clinical rotation.

Method: This study involved 278 students from 3 professions consisting of 152 medical students (54.7%), 80 pharmacy students (28.8%) and 46 nursing students (16.5%). The IPE program was held for two weeks, employing various teaching and learning methods such as case-based discussion, journal reading, interviews , lectures and self-reflections. The perceptions of IPE were measured using the Interdisciplinary Education Perception Scale (IEPS), while the IPE competencies were assessed using the Interprofessional Collaborative Competency Attainment Survey (ICASS). Both instruments were completed before and after the IPE program. Data was analyzed using paired t-test, Pearson correlation, one-way Anova and linear regression test.

Results: This study showed that gender (p=0.033) and perceptions (p=0.000) influenced IPE competencies after completing the IPE program (R2 4,9%). Pre-post IPE perceptions and competencies of medical students were not significantly different (p > 0.05) with those of nursing and pharmacy students. All students (n=278) experienced a significant increase in IPE perceptions and competencies (p=0.000).

Conclusion: Gender and perceptions play important roles in IPE competencies. Male students are expected to participate more actively in the achievement of IPE competencies. There needs to be gradual and continuous effort to improve IPE perceptions in order to support IPE competencies and produce good collaboration in IPCP.

OA-105 Faculty development strategies for interprofessional education: A scoping review

Amelia Dwi Fitri[1], Ardi Findyartini[2,3], Diantha Soemantri[2,3,4], Rita Mustika[2,3], Anwar Santoso[5], Mora Claramita[6]

[1] Department of Medical Education, Faculty of Medicine and Health Sciences, Universitas Jambi, Jambi, Indonesia

[2] Department of Medical Education, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia

[3] Medical Education Center, Indonesian Medical Education and Research Institute (IMERI), Faculty of Medicine Universitas Indonesia, Jakarta, Indonesia

[4] Coordinator for Integrated Curriculum, Health Sciences Cluster, Universitas Indonesia

[5] Department of Cardiology- Vascular Medicine, Universitas Indonesia, Harapan Kita Hospital-National Cardiovascular Centre, Jakarta, Indonesia

[6] Department of Medical Education, Faculty of Medicine, The Skills Laboratory, Universitas Gadjah Mada, Jogjakarta, Indonesia

Background: Interprofessional Education (IPE) is proven to be an effective approach to enable collaborative-ready graduates in health profession education. One of the biggest challenges in its implementation is preparing competent and facilitators who are ready to create a supportive environment for various health professions students. Using the 3-P model developed by Biggs to classify evidence from a systematic review of the literature, Reeves et all (2016) reported that faculty development is an enabling factor for IPE. This review aims to explore the faculty development strategies for IPE.

Methods: A scoping review was undertaken to identify existing faculty development strategies for interprofessional education. Keywords of "faculty development" AND "interprofessional education" were entered into the EBSCO database to obtain articles published from January 2010 to June 2021. Hand searches of the Journal of Interprofessional Care were also undertaken because of its focus on IPE. All papers with full paper and published in English were included.

Results and discussion: A total of 14 eligible studies were included. Most papers highlighted successful faculty development for undergraduate students. Only one study reported "the epic failure". The institutional support for interprofessional faculty development was identified. Five studies reported that facilitators continue to feel unprepared to facilitate IPE after the program. A need for comprehensive assessment for the faculty development was identified. The rest of the nine studies reported improved knowledge, skill, and positives attitude toward IPE. Although the faculty development programs had followed the recommended strategy, attention to individual need assessment of the facilitator/teacher in IPE was still lacking.

Conclusion: This review suggests a more comprehensive need assessment aiming at identifying the most relevant faculty development for IPE. Such assessment will be benefited from the use of a standardized and concise instrument to identify the teacher's readiness to become a competent IPE facilitator.

OA-106 Evaluation of the 4C/ID model application in online clinical skills learning

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Background: The 4C/ID model is an instructional design model that creates a whole task-based learning environment. This model is a learning model that is suitable for use in online clinical skills learning. The theory of cognitivism and constructivism that underlies this model provides learner-centred in online clinical skills learning. In addition, complex learning tasks helps to improve students' knowledge, attitudes, and skills.

Aim of study: This study aims to evaluate the application of the 4C/ID model in online clinical skills learning, and to examine the perceptions of students and instructors towards the application of the 4C/ID model in online clinical skills learning.

Method: This research is a mixed study (quantitative and qualitative). The quantitative study is divided into four stages: the questionnaire development stage, the 4C/ID model development stage, the 4C/ID model implementation stage, and the skills assessment stage. The questionnaire development stage consisted of questionnaire translation, expert review, and pilot study. The 4C/ID model development stage consists of the preparation of the 4C/ID model and expert review. At the stage of applying the 4C/ID model, the sample was selected through a stratified random sampling technique. A total of ten groups of sixth semester students in clinical skills learning were randomly selected to take part in online neurology physical examination learning by applying the 4C/ID model. Before and after learning, students were asked to work on pre-test and post-test questions as well as pre-survey and post-survey questionnaires. The skill assessment stage is carried out with a skills test through video recordings of students' skills. Qualitative study consists of FGD and in-depth interviews. The sample for FGD stage was 10 students, selected through purposive sampling technique. In-depth interviews were conducted with three instructors involved in online 4C/ID learning

Results: The results showed that 76.8% of students obtained higher scores on the post-survey questionnaire, 84.1% of students obtained higher post-test scores, and 82.9% of students passed the skills test. The results of FGD and in-depth interviews showed various advantages of online clinical skills learning with the application of the 4C/ID model, including increasing students' understanding of the theoretical basis of skills, training students' thinking process to be more critical and focused, increasing student and instructors interaction and enthusiasm in learning, as well as helping students to prepare for actual exams and clinical practice. However, various obstacles were also found, including the inactivity and unpreparedness of students in learning, lack of learning time, internet connection disorders, and incompatibility of the skill material being taught.

Conclusion: The application of the 4C/ID model in online clinical skills learning has been proven to be effective in increasing students' satisfaction, knowledge, and skills. This model can be one of the solutions to be applied during the covid-19 pandemic, where face-to-face clinical skills learning cannot be carried out. Therefore, several preparations need to be made to optimize the application of the 4C/ID model, including preparation of facilities and infrastructure, preparation of students, and preparation of instructors.

OA-107 The relationship between stress level and learning motivation in first-year pre-clinical students at The Faculty of Medicine Muhammadiyah Surabaya University

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Background: Stress is a state or feeling experienced by individuals due to the demands placed on them exceed their resources. Stress may result in physical and mental health problems. Previous research in the medical education setting discovered a high occurrence of stress in first-year students. Stress has the potential to affect student learning motivation. Learning motivation is an intrinsic force in the student's personality as an effort to achieve maximum learning outcomes. Motivation can be an important factor for successful learning.

Aim of study: To determine the relationship between stress level and learning motivation in first-year pre-clinical students at the Faculty of Medicine Muhammadiyah Surabaya University

Method: Using an observational analytic method with a cross-sectional study. The sampling technique applied a total sampling on all first-year pre-clinical students. Data were collected using the MSSQ and MSLQ questionnaires via Google form on respondents who fit the inclusion criteria and obtained the respondent's agreement through informed consent.

Results: The results of the analysis on 66 respondents with the Sommers'd Gamma analysis showed a significance value of p: 0.041 (<0.05). The highest level of stress was moderate (53.0%) and learning motivation was high (54.5%).

Conclusion: There was a relationship between stress level and learning motivation in first-year pre-clinical students, Faculty of Medicine Muhammadiyah Surabaya University.

ORAL PRESENTATION GROUP 2

OA-201 Evaluation of the clerkship medical students' remote learning experiences during the COVID-19 pandemic: A qualitative study

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Background: The coronavirus disease 2019 (COVID-19) pandemic and physical distancing policy has caused a global dramatic impact, including the closure of schools and workplaces, which in turn led to a sudden shift towards remote learning system in almost all education sectors including the medical education. The medical education sector has urgently transitioned the entire clerkship medical students' curriculum to remote learning system for a temporary period. While it may seem functional; the outcomes of these changes require subsequent and thorough evaluation.

Aim of study: This study aims to review the clerkship medical students' experiences of remote learning, and subsequently identify its advantages and disadvantages in medical education.

Method: A total of 20 clerkship medical students were selected from the School of Medicine and Health Sciences, Atma Jaya Catholic University of Indonesia by purposive sampling method. Three main themes regarding the clerkship medical students' experiences of remote learning including the study habits and skills, lifestyle factors, and community of inquiry were conducted through Focus Group Discussions (FGDs) with a phenomenological approach. To ensure the data validity, the investigator and data source triangulation methods were implied.

Results: Most students are satisfied with the remote learning system which has been well implemented during the COVID-19 pandemic. However, several students stated that they are overwhelmed by too many assignments in this learning system. Moreover, the students also need practical learning in clinical settings. In an after-pandemic scenario, most students indicated a preference for remote learning system for the theoretical parts of their studies and hope to return to learn in case-based discussions and through bedside teachings when it is safe to do so.

Conclusion: Clerkship medical students show great satisfaction with the flexibility and easy accessibility of remote learning system. However, several disadvantages including the need to return to clinical learning system still remain and require further studies and evaluations in order to improve the quality of remote learning system. Therefore, its efficiency and effectiveness in medical education can be ensured.

OA-202 Online formative assessment in undergraduate medical education: Does it drives learning?

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Background: Formative assessment is a feedback-based assessment that enhances students' learning. During the pandemic, all forms of assessment should be done in online form. Therefore, we develop the Online formative assessment (OFA) that facilitates feedback during an online learning session.

Aim of study: This study aimed to explore the learning impact of OFA for undergraduate students, such as learning preparation, feedback perception, and self-reflection.

Method: We used the mixed method with an exploratory approach. The quantitative data was taken from 150 students in the Dermatology block who experienced OFA, using 26 questions adapted from AEQ (Assessment Experience Questionnaire) and analyzed by pre-post design (paired-T test). To explore deeper understanding, we used Qualitative data 4 FGD (N=18 using content analysis.

Results: We found the difference in students' preparation($p<0.5$), feedback perception ($p<0.5$) and no difference in self reflection ($p>0.5$). In Qualitative data, we found three themes as follows: (1) the online pre-test has a positive influence in preparation; (2) Variability in feedback from the teacher during a synchronized session; (3) need specific written feedback from teachers.

Conclusion: These findings represent that OFA can drive students' learning especially in the preparation and online feedback mechanism. However, we still found the challenges in the quality feedback from teachers and self-reflection skills in students.

OA-203 Piloting a feasible and beneficial progress test: An experience from a young faculty of medicine in Indonesia

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Background: Not all medical schools in Indonesia used Progress Test (PT), although studies in different countries reported benefits. Several institutions may perceive the preparation and administration of PT, item analysis, and giving feedback to students as burdensome compared to the benefit.

Aim of study: To explore the feasibility and the benefit of PT in Faculty of Medicine Universitas Surabaya (FM Ubaya).

Method: The first PT was held online for all students of FM Ubaya in April 2021. We used the Zoom and Safe Exam Browser (SEB) as the platforms. The duration of PT was 180 minutes. The PT consisted of 150 items resembled national examination (Ujian Kompetensi Pendidikan Profesi Dokter /UKMPPD). We selected items from the item bank. Students received individual feedback for their performance and filled out a validated questionnaire to explore their views on PT. The questionnaire used Likert's scale (1 = strongly agree to 5 = strongly disagree).

Results: Two hundred and twenty five students accomplished PT. The mean scores were 29,40 (SD 6,89), 41,27 (SD 8,37), 48,46 (SD 11,69), 50,03 (SD 8,97), and 51,51 (SD 8,53) consecutively from first to fifth year students. Item analysis showed 89% of items can discriminate upper and lower achievement students. 191 of 225 students (85%) filled out the questionnnaires. Student perceptions of PT's ability to assess academic learning with mean 3,1 (SD 0,35), PT's ability to support clinical learning 2,32 (SD 0,44), and the PT's impact on exam preparation 3,62 (SD 0,57).

Conclusion: Although the implementation of PT needs some effort, strong leadership and technical support made PT feasible. PT is beneficial as a quality indicator of education. The improvement of scores was consistent with the students' year. The questionnaire showed positive responses of students toward PT. We recommend collaboration among institutions to share resources to conduct PT.

OA-204 Need of mental health facility for YARSI medical students

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Background: Mental issues that may occur among medical students are anxiety, stress and depression become inevitable due to many academic and non-academic loads. The frequency of depression and stress in medical students is significant among the first and final-year students. The absence of definite data related to the availability of mental health services on campus is unknown.

Aim of study: This study aims to explore the benefits for students of mental health services at the Faculty of Medicine, Yarsi University.

Method: This study recruited ten medical students from the class of 2017 Yarsi University. The respondents were divided into two major groups, namely groups that are active in organizations and those who aren't. Respondents were involved in the interview process. Collecting data through in-depth online interviews by asking several questions regarding mental health including criteria, factors, coping strategies to the effect of mental health services on students. Furthermore, data from the interview excerpts were processed using the thematic content analysis method that will determine the pattern to find a theme through the data of the interview.

Results: The results based on respondents showed that mental health is fundamental and inseparable from the life of each person, as well as the presence of mental health services in treating mental issues.

Conclusion: The importance of mental health and the service itself for medical students become necessary for mental care.

OA-205 Medical student's learning outcome during online learning

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Background: During the current corona virus pandemic, various activities to gather large numbers of people must be avoided because they will become the center of the spread of the virus. Teaching and learning activities, tutorials, and laboratory practice also cannot be done, so the schedule must be changed completely from offline to online learning. Online learning refers to learning activities where content and learning activities are provided through technology-based supporting facilities, such as websites, virtual learning environments, or social media. The learning environment is an element of great concern in any educational activity in various institutions. The learning environment affects the learning process, student and teaching staff performance, and educational outcomes.

Aim of study: To know the relationship between students' perceptions of the online learning climate and the academic achievement of students.

Method: This study was conducted with a cross-sectional quantitative research design. Data collection was conducted at one private medical school in Indonesia. Second year medical students were selected because this group of students had already experienced offline and online learning. The instrument used in this study was the EEAM (E-learning Educational Atmosphere Measure) questionnaire. We then analyzed the correlation between the EEAM and students' learning outcome to determine the relationship between variables and to assess the strength of the relationship.

Results: A total of 215 undergraduate medical students completed the questionnaire. Participants were 68.4% female. One student (0.5%) felt dissatisfied with the learning environment, 175 (81.4%) students felt netral, and the remaining 39 students (18.1%) felt satisfied with the learning environment. From the final block score 98.6% of students pass the exam based on the institution's standard. The strength of the correlation of each component in EEAM with students' learning achievement were very weak ($r = 0.0 - < 0.2$). There are several components that have a negative correlation, program effectiveness, ethics and professionalism, and student support. Based on comparative test (p value = 0.964) there is no significant relationship between block scores and student perceptions in EEAM.

Conclusion: Students' perceptions on online learning was found to be positive and the achievement of student learning outcomes during online learning is also good. But, in this study there was weak correlation and some component have negative correlation between students' perceptions with student achievement, and also statistically there was no relationship between the student perceptions in learning environment and student achievement.

OA-206 Self confidence of internship doctors in managing COVID-19 cases: A cross-sectional study

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Background: Thousands of fresh graduate doctors in Indonesia are assigned to tackle COVID-19 despite their limited experience. They are placed in various hospitals and Public Health Centers (PHCs) inside and outside of the COVID-19 epicenter (Java and Bali). A course titled "COVID-19 Online Module" (COM) held by Faculty of Medicine Universitas Indonesia was conducted to provide them the necessary knowledge, thus hopefully increasing their confidence in the patient management during the pandemic. Self-reported confidence may contribute towards clinical knowledge and skills through the use of educational opportunities and it is expected to support mastery achievement in clinical practice.

Aim of study: The purpose of this study was to measure the self-confidence of internship doctors in managing COVID-19 upon completion of COM and the national internship program, comparing the ones working inside and outside of the COVID-19 epicenter.

Method: A validated questionnaire (18 items) was completed by internship doctors from the third batch of 2020 working inside (n = 444) and outside (n = 649) of the epicenter. Mann-Whitney test was performed to compare results from the two groups.

Results: Cronbach's alpha score of the questionnaire was 0.909. The overall self-confidence score of internship doctors was quite high (mean 87.21). Epicenter group had a significantly higher score ($p < 0.001$) than those working outside. The epicenter group showed significantly higher self-confidence score in performing infection prevention inside the healthcare facility ($p = 0.001$) and diagnosing COVID-19 ($p < 0.001$). No significant difference of self-confidence score in giving treatment for COVID-19 cases between each group ($p = 0.904$) and their perception towards COM regarding their self-confidence ($p = 0.373$).

Conclusion: This study provides evidence how national internship program and COM contributed to doctors' self-confidence in COVID-19 management. Further study is necessary to evaluate the doctors' self-confidence and performance in a longitudinal manner.

OA-207 Factors that influenced willingness and readiness of medical students to volunteer during COVID-19 second wave in Indonesia: A cross-sectional study of one medical school

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Background: During the COVID-19 second wave in Indonesia, which has caused a huge damage to the health systems, involvement of medical students to strengthen the COVID-19 response as volunteers is needed.

Aim of study: This study aimed to assess (1) the prevalence of willingness and readiness to volunteer, (2) sociodemographic factors that influenced willingness and readiness to volunteer and (3) perception towards factors that increase and decrease the willingness to volunteer during the COVID-19 second wave.

Method: A cross-sectional survey was conducted among medical students of Universitas Indonesia from 25 July to 15 August 2021. Sociodemographic variables and perception towards factors that increase or decrease the willingness and readiness to participate were collected.

Results: Among 1165 eligible participants, 330 of whom (28,2%) filled the questionnaire. 93.3% reported were willing to volunteer, however only 23.6% of the subjects were ready. Multivariate analysis showed that living without the elderly (OR 3.69, 95% CI: 1.33–8.92, p = 0.012) and having a history of volunteering (OR 2.74, 95% CI: 1.06–7.07, p = 0.037) were independent factors towards the willingness to volunteer, while there was no factor significant towards the readiness to volunteer. Factors that were perceived to increase the willingness to volunteer were moral and social responsibility, having close friends who participate, and gaining volunteering experience and more social networks. Factors that perceived to decrease the willingness to volunteer were parent's prohibition to participate in volunteering activity and fear of family's health.

Conclusion: A very large proportion of medical students were willing to volunteer, yet only few of them were ready. A strategy to involve the medical students, considering many of whom had a high perception of moral and social responsibility, is needed. Programs that increase volunteer readiness and ensure their safety are recommended.

ORAL PRESENTATION GROUP 3

OA-301 Perception of health profession students of Universitas Tanjungpura on interprofessional health profession

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Background: People today expect the quality of good health care. According to Institute of Healthcare Improvement (IHI), United State of America, formally identified interprofessional collaborative practice was capable of lowering the infection case from 22% to 5%. Inversely proportional to WHO study, interprofessional collaborative practice in Indonesia is bad. Low perspective of how professional roles and responsibilities causes overlapping health-care practice.

Aim of study: To know the perception of Health Profession Students of Universitas Tanjungpura on Interprofessional Health Profession.

Method: This research uses a qualitative design with phenomenology approach.

Results: The result showed a lack of knowledge and understanding from health profession students towards Interprofessional Collaborative Practice.

Conclusion: The majority of health profession students have wrong perception of the Interprofessional Collaborative Practice.

OA-302 Mental health in first year medical students of YARSI University

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Faculty of Medicine, Yarsi University, Indonesia

Background: Mental health problems are often experienced by medical students and can decrease productivity levels to cause learning difficulties.

Aim of study: This study aims to find out an overview of the state of mental health in first-year medical students of Yarsi University.

Method: This research was conducted with a descriptive non-experimental quantitative approach. The population in this study was 66 first year students of the medical faculty of Yarsi University. Sample selection using simple random sampling technique. Emotional mental disorders are enforced if a person experiences six or more complaints from 20 questions. Data analysis is done with univariate analysis.

Results: The number of respondents with emotional mental disorders was 35 of 70 students (50%). The most complaints experienced by first year students of the medical faculty of Yarsi university are symptoms of decreased energy such as feeling easily tired (64.3%), difficulty enjoying daily activities (37.1%), and tired all the time (24.3%) followed by cognitive symptoms such as difficulty making decisions (57.1%), difficulty thinking clearly (45.7%), and difficulty completing tasks (20%).

Conclusion: Mental disorder in first medical students was serious problem. This needs to be addressed from internal and external factor.

OA-303 Self-regulated learning profile of undergraduate medical students in the implementation of online learning during COVID-19 pandemic

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Background: Self-regulated learning (SRL) is beneficial to regulate student's learning. SRL strategies are highly relevant in learning adaptation during the pandemic when students are expected to be more active and self-directed. This study aims to describe SRL profile of undergraduate preclinical students during this pandemic and its relation to final block scores.

Method: This study used a cross-sectional design and measured SRL components of preclinical medical students using the validated Indonesian version of Motivated Strategies Learning Questionnaire (MSLQ). The population was undergraduate preclinical medical students in a medical school in one medical school in Sumatera, Indonesia. Data collection was completed in June 2021 and the questionnaire was administered online. The data were analysed descriptively and One Way ANOVA statistic to analysed based on gender. Correlation analysis was conducted to assess the relationships of the SRL scores with the students' block final exam scores.

Results: A total of 346 students participated in the study (response rate of 71,04%). The respondents consisted of 113 (32,66%) male and 233 (67,34%) female students. High SRL level was shown by 154 (44,5%) students and intermediate SRL level by 196 students (55,5%). The mean scores of peer learning and help-seeking were the lowest among other SRL components. There was statistically significant difference of SRL mean of year 1, 2 and 3 students (4,92, 4,82 and 4,90 respectively, ANOVA p = 0,032). Furthermore, there was also a significant difference of SRL mean scores based on gender (5,02 for male vs 4,87 for female, p=0,030). There was a no significant correlation of SRL scores and final block scores (r=-0,017, p=0,759).

Conclusion: More preclinical year students showed intermediate level of SRL in during the pandemic. There were differences of SRL scores between student years and gender but it was no significant correlation of SRL score and final block scores. Further study is necessary to explore factors influencing the current SRL profile of students and to support students' adaptation in their online learning.

OA-304 Deploying reticulocytes: Reflections and feasibility assessment of medical students' mobilization during the COVID-19 pandemic in Indonesia

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Fakultas Kedokteran Universitas Indonesia,

Background: As COVID-19 cases continue to surge in Indonesia, politicians and academicians alike have been proposing the idea of deploying medical students to help the fight. Medical students are considered to be valuable resources which the state could utilize in times of need, just like reticulocytes of the body would be mobilized when erythrocytes count is low. However, just like reticulocytes, medical students are not mature enough to take all the burdens. They still have a lot to learn and need to be assisted. Without a proper plan, a call to arms for medical students might just be another buzzword in the current infodemic atmosphere.

Aim of study: To assess medical students' mobilization in fighting COVID-19 in light of the Indonesian setting.

Method: Literature search was conducted on databases, MEDLINE and Google Scholar, as well as grey literatures with keywords: "medical students", "COVID-19", and "mobilization" with their respective synonyms. At least 20 references were obtained to conduct this review.

Results: Most of the literatures obtained were about experiences during early phases of the pandemic, ranging from transporting PPEs to teleconsultations. Moreover, activities presented were mostly student-initiated and occur in a local setting. These prove to be challenging to implement in the current Indonesian landscape where cases rise and fall as we enter new normal. During a new wave, medical student mobilizations are suddenly discussed and implemented without proper planning. However, when cases drop, the engines stop, only to be activated again hastily when a new wave comes. There should be a continuous approach that can satisfy all conditions. A clear direction on the national stage while still respecting local autonomy is paramount to a successful mobilization.

Conclusion: A combination of state-planned and local initiatives, coupled with commitments to adapt and utilize throughout the different stages of the pandemic is key to successful deployment of the "reticulocytes".

OA-305 Collaborative learning in PBL: What can go wrong and how to deal with it

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Background: Collaborative learning is a core value of Problem-based learning (PBL). Many medical schools implement collaborative learning in the form of tutorial discussions. School of Medicine, Universitas Syiah Kuala is currently implementing PBL with tutorial discussions as its core learning activity format. Studies have been conducted in various places with results implying contextual differences regarding the implementation of tutorial discussion.

Aim of study: This study aimed to explore the implementation of tutorial discussions as a core learning activity format of PBL at the School of Medicine, Universitas Syiah Kuala from the perspectives of medical teachers and students.

Method: We conducted a qualitative study with a phenomenological approach. Respondents were medical teachers and students. Data collection was conducted by using focused-group discussion (FGD). Data analysis was done by using qualitative thematic analysis.

Results: This study identified three themes: (1) inadequate students' readiness for collaborative learning, (2) needs for formulation and implementation of contextually standardized tutorial discussion guidelines, and (3) suggestion for improvements through curriculum revision.

Conclusion: The implementation of tutorial discussions as a core learning activity format of PBL requires preparation. To improve students' readiness for collaborative learning, we suggest the employment of various learning formats in a coordinated manner, specifically within the first year of the curriculum. Further studies are needed to evaluate the effect of the suggested intervention.

OA-306 Self-regulated online learning profile among medical students amidst curriculum adaptation during COVID-19 pandemic

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Medical Education Center IMERI, Faculty of Medicine Universitas Indonesia, Jakarta

Background: Student-centered learning (SCL) is an approach in which teachers do not transmit knowledge directly to the students, but rather help students construct the knowledge themselves, hence the learning process depends greatly on the students.1 In optimizing SCL, self-regulated learning (SRL) plays a crucial role. SRL is defined as active participation in terms of metacognitive, motivation, and behavior during one's own learning. The COVID-19 pandemic has influenced many aspects, including the medical education which must adapt the learning system to ensure students' safety by implementing online and hybrid learning. The curriculum adaptation increases the urgency for both SCL and SRL.

Aim of study: With the rising urgency of SRL in improving SCL during COVID-19 pandemic, this study aims to investigate the SRL profiles of students and the study challenges in the current curriculum changes.

Method: This cross-sectional study used a total sampling approach to medical students in preclinical and clinical years in the Faculty of Medicine, Universitas Indonesia. The validated Online Self-regulated Learning Questionnaire (OSLQ) scale was used to evaluate the self-regulated online profiles in medical students. Qualitative analysis was used to assess the challenges faced by medical students amidst curriculum adaptation during the COVID-19 pandemic.

Results: Analysis of results will be completed by the end of September 2021. We expect to compare and contrast the online SRL profiles of medical students across academic years and its role to enhance student-centered learning. We will also attempt to highlight the varying challenges faced by medical students during online learning.

Conclusion: The study is expected to report the self-regulated online learning profiles of the medical students at Faculty of Medicine, Universitas Indonesia (FMUI) to inform how to best support students' adaptation and their self-regulated learning skills during uncertain time of the pandemic.

OA-307 Stress, stressor, and coping strategy in final year medical students

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Background: Stress is an individual's adaptive reaction to a situation perceived as a threat. This threatening situation becomes a difficult situation to overcome by the individual concerned. The high prevalence of stress in medical students and the number of stress factors in Indonesian medical students.

Aim of study: This study aims to find out stress, stressors, and coping strategy in the final year of YARSI University medical students.

Method: This study used data based on respondents from medical students of YARSI University 2017 with a total of 100 people. This type of research was conducted on a set of objects that aims to see an overview of phenomena that occur within a particular population. Researchers are trying to describe the magnitude of the problem and the characteristics of a phenomenon. Data analysis was conducted using PSS (Perceived Stress Scale) and MSSQ (Medical Student Stressor Questionnaire) testing.

Results: The results showed that based on PSS testing more students experienced severe stress levels as many as 37 people (37 %). Based on MSSQ testing, most of the students were 53 (53%) feeling moderate stress. The biggest stressors experienced by students as many as 55 people (55.11 %) stressors of tasks and workloads. The coping strategy was most in demand by students, namely strategy coping by solving problems as much as 33%.

Conclusion: Medical students often have conflicts with assignments although various problems can eventually trigger stress. Coping mechanisms used by students will help in designing appropriate intervention strategies to relieve stress and improve student's learning abilities.

Saturday,
23rd October 2021
10.30 - 12.00 (UTC+7)

Poster Presentation

POSTER PRESENTATION GROUP 1

P-101 Curriculum survey: The implementation of medical education curriculum in universities across Indonesia

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Background: Curriculum is an important aspect in medical education. In Indonesia, it is performed under the Medical Education Law, with some conditions and additions allowed, thus making variation in the implementation.

Aim of study: This research was conducted to assess the variation of medical education curriculum implementation, including curriculum models, decision-making, learning strategies, evaluation method, and student engagement, among universities in Indonesia.

Method: This research included 19 universities with SCOME CIMSA structure in cross sectional descriptive design. The samples were from medical education unit or study program. Data collected using validated questionnaire and analyzed descriptively to see the parameters measured.

Results: Medical schools are mostly from public universities, located in Java, accredited A/Excellent, and implemented OBE curriculum model (89.5%), with the approach, decision-making, learning strategies, and evaluation that is in accordance with government regulation, except for community-based approach (42.1%), interprofessional learning strategies (61%), and students involvement (68.7%) that still not performed by many of them.

Conclusion: Differences in curriculum implementation were observed among medical schools in Indonesia. Most of them have implemented OBE curriculum that is in accordance with Indonesia's government regulation. However, there were some practices that still do not match with OBE criteria even though they confirmed to apply it.

P-102 Developing medical professionalism during online learning: What do we need?

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Background: The Pandemic of COVID - 19 encourages adaptation process in medical education. Its become challenging especially in medical professionalism teaching- learning in medical education. As one of main competence medical doctors in Indonesia, the institution and the faculty must ensure that medical students learnt and achieved it during their education, due to some limitations that occur in Indonesia, such as geographic differences and internet accessibility.

Aim of study: This study was aimed to get medical students and teachers about medical professionalism learning during online learning in the Faculty of Medicine, Universitas Tanjungpura, West Kalimantan.

Method: Qualitative study using phenomenology methods had been done to this study. Total respondents were 180 consisting of 175 medical students and 5 faculties as data triangulation process. Data collecting held by validated questionnaire, focus group discussion, and in depth interviews. Data analysis and interpretation were undertaken using a constructivist approach.

Results: Most of the respondents stated that professionalism need role model medical teacher in the learning process. Limitation during online learning happens because of the internet accessability. Internal motivation from the medical students take a big part in learning process of medical professionalism, followed by medical theachers articulation.

Conclusion: Online learning during pandemic, giving challenge to all process in medical professionalism teaching-learning. The pivot role of medical students internal motivation and teachers articulations help its process.

P-103 Attitudes of first-year medical students towards mental disorders

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Background: Mental disorders are a form of emotional change and personality harmony. The increasing number of mental disorders causes problems such as stigma and discrimination of people with mental disorders. The prevalence of medical students who have less knowledge and negative attitudes towards mental disorders is still quite high, especially in first-year students.

Aim of study: This study was to find out the attitude of medical students of YARSI University to mental disorders.

Method: Data were collected using the online Community Attitude towards the Mental Illness (CAMI) questionnaire, at Yarsi University Medical Students as many as 143. The data were analyzed using univariate and bivariate analysis.

Results: Statistical analysis data obtained the most respondent in first-year students 58 people (40.6%) with an average age of 18 years of 31.5% and dominated by women as many as 118 people (82.5%). The majority of students had no personal experience in their families with a history of mental disorders, 123 people (86%). Students mostly had a pro attitude towards mental disorders: authoritarianism 86 people (60.1%), virtue 142 people (99.3%), social restrictions 87 people (60.8%), and the ideology of the health community 142 people (99.3%).

Conclusion: The attitude of medical students has a pro attitude furthermore better way of dealing with people with mental disorders that have nothing to do with the level of generation and personal experience.

P-104 Medical techno-sociopreneurship elective module for undergraduate medical students: Experience from top medical school in Indonesia

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Background: Future medical doctors embrace pressing challenges in ideating a concrete solution to existing health-medical problems, by deploying state-of-the-art technology, measuring social impact, and considering commercial sustainability. Facilitated by multi-disciplinary teachers, design thinking approach and business canvas model can be applied to stimulate medical students' critical thinking, socio-technology literacy, and professionalism.

Aim of study: This paper aims to describe the planning, structure, and evaluation feedback of the Medical Techno-sociopreneurship (MTSP) Elective Module from the year 2019 to 2021 at the Faculty of Medicine, Universitas Indonesia.

Method: The MTSP module consists of interactive lectures, group discussions, series of seminars by successful health-medical industrial players and academics, fieldtrip and group innovation project.

Results: Medical students (n = 50) indicated their overall satisfaction of 4.7 on the 5-likert-scale on module management aspects. Over the academic years, continuous improvement on group project details and mentoring has been conducted.

Conclusion: MTSP has grown as one of medical students' favorite elective modules as they realize the importance of innovative thinking towards tech-savvy, social-professional responsibility, and sustainable solutions; attributes critical for future medical practice.

P-105 Health Workers Perception on Implementation of Interprofessional Collaboration on Antenatal Care in Puskesmas Andalas

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Background: Maternal Mortality Rate (MMR) can be prevented by optimal Antenatal Care (ANC). Optimal quality of ANC requires health workers' role through Interprofessional Collaboration (IPC). IPC can improve the quality of health services. The purpose of this study was to determine the perception of health workers towards IPC in ANC.

Aim of study: To examine health workers perception of IPC implementation on ANC in Puskesmas Andalas.

Method: This research is a descriptive study using a cross-sectional design. The sample were 40 health workers who were determined by the total sampling method. The study used an Interdisciplinary Education Perception Scale (IEPS) questionnaire.

Results: The 33 health workers (82.5%) had a good perception of IPC implementation on ANC with the collaborative evidence component had the highest percentage (90%) and the understanding of other professions had the lowest percentage (62.5%); furthermore there is no bad perception of each component of perception (0%). Doctors, dentists, and nurses had a good perception of IPC in ANC with the highest value (100%), followed by midwifery (87.5%) and pharmacy (66.7%). nutritionists and medical laboratory technologists have a moderate perception of IPC in ANC (66.7%).

Conclusion: Most of health workers have a good perception on the four components of perception except the nutritionists and the medical laboratory technologists who have moderate perception on the component of competency and autonomy as well as the component of understanding of other professions so that efforts are needed to improve these competencies.

P-106 Preparing resident as teacher: Implementation of online role play and peer-assessment

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Background: Residents in Indonesia are required as teachers, especially for undergraduate students in a clinical situation. Provided training is one way to increase their understanding as a clinical teacher and provide teaching skills. At UB, training for new residents has prompted from face-to-face to online learning process due to COVID-19 pandemic. Online role play and peer assessment were used to preparing new residents as teachers.

Aim of study: This study aims to introduce new learning process based on internal evaluation to overcome the difficulties in providing new residents with teaching skills during pandemic.

Method: The participants were 128 residents in the RAT online course. Residents were grouped into 8 groups. After the introductory lecture, each group was assigned to made one role play video from one of teaching in the clinical setting (duty report, case report, outpatient care, or hospitalized care) and assessed three videos which made by other groups. Assessment reports were presented in the next day. At the end, survey was conducted to observe the resident perception for this online learning process using the questionnaire and was responded by 97 residents.

Results: Most of the residents considered agree and strongly agree that role play and peer-assessment done smoothly with online condition. There were 89 students (92%) considered that the role play and peer-assessment helped residents to overview the implementation of teaching in a clinical setting. There are 55 residents (57%) considered strongly agree that the presentation and discussion increased their understanding for their role in teaching undergraduate in clinical settings, while only 3 residents (3%) considered disagree.

Conclusion: The combination of online role play and peer-assessment is a good choice for preparing residents as teachers in a clinical setting. It is a potential solution for not only limitation of face-to-face interaction during pandemic, but also course time or staffs.

P-107 Medical student career choices and their relationship to the role of self-directed learning

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Background: The demands of being a doctor from various graduate users create many careers for doctors. The choice of students to continue their careers as primary care doctors, doctor specialists, doctor army, and lecturers is influenced by various factors. Student independence as an internal factor in making choices can be one of the determining factors.

Aim of study: The purpose of this study was to examine the relationship between student career choices and self-directed learning.

Method: This study used a Self-Directed Learning Readiness questionnaire and an open questionnaire to assess the characteristics of the respondents which included gender, career choice, parental occupation, and period of interest in entering medical school. The research sample is an academic stage student.

Results: The number of respondents is 160 medical students. The results showed that the level of Self-Directed Learning Readiness (SDLR) was dominantly high as many as 142 respondents (88.8%). The relationship between career choice and SDLR seen from the p-value of 0.388 ($p>0.05$) was not significant. Other factors such as gender, parents' work background, period of interest in attending medical school also had a $p>0.05$.

Conclusion: The choice of a student's career is influenced by various factors internal and external.

POSTER PRESENTATION GROUP 2

P-201 Predictive validity of clinical rotation MCQs-CBT and progress test on students performance in MCQs-CBT national examination

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Background: Evaluation on the assessment system applied in an educational institution is highly recommended to improve its quality. One of the assessment methods used in all Departments of Clinical year program of Unissula Medical Faculty is MCQ-CBT, which the results become one of requirements to pass the clinical rotation in each Department. In addition, MCQ-CBT is also used in the progress test for the UKMPPD preparation program. Passing this program is a condition for attending national examination (UKMPPD).

Aim of study: The purpose of this study is to evaluate whether final examination of each clinical rotation and progress test of national examination preparation program predict students' the performance in UKMPPD.

Method: This was cross sectional study evaluating the MCQ-CBT scores of 446 first taker UKMPPD participants from 2018 to 2019. The mean scores of final MCQ-CBT from 12 Departments, mean scores of MCQ-CBT Progress Test of UKMPPD preparation program and students' scores of UKMPPD were collected and were analysed in a discrete, employing Pearson correlation test and linear regression.

Results: The mean scores of final MCQ-CBT from 12 Departments, progress test and UKMPPD were 73.98 (±3.54); 65.74 (±3.64) and 77.93 (±4.63), respectively. Pearson correlation test results there was correlation between final MCQs-CBT from 12 Departments and UKMPPD scores ($p=0.00$ with $r=0.473$) and between the mean of the progress test scores and UKMPPD scores ($p=0.00$ with $r=0.589$). The linier regression test indicated that adjusted R square was 0.381 and the regression equation model was $Y = 16.002 + 0.611 (X1) + 0.294 (X2)$.

Conclusion: There is a moderate positive correlation between mean score of final MCQs-CBT in 12 Departments as well as the mean of progress test scores and UKMPPD scores. The final exam and progress test scores were able to predict the performance of students in MCQ-CBT UKMPPD by 38.1%.

P-202 The correlation of student score in nervous system module between undergraduate and clinical stage to the nervous system score in Computer-Based Test (CBT) of medical competency test

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Background: The Medical Competency Test is an exit exam to obtain a doctor's degree. Computer based test is held to assess the cognitive aspect of examinees. The examinees are student who have completed both undergraduate and clinical stage. However, in fact, the failure number was quite large. There were 58.39% of 4,086 examinees who failed Competency test in 2018. This situation should be a reflection to learning process. One of ideal module to assess the continuity of learning from undergraduate and clinical stage is nervous system module.

Aim of study: To analyze the correlation between nervous system modules of undergraduate and clinical stage to CBT score on nervous system.

Method: This is an observational analysis study with retrospective cohort. Samples are all medical students of Universitas Abdurrab who had participated in competency test 2014-2019. Data includes modules score and feedback of competency result from National Competency Test Committee. Data were analyzed using Spearman test.

Results: The results showed there was significant correlation between module Nervous System Disorders at undergraduate stage to the score of nervous system on CBT, by the (r=0,32) and there was no significant correlation between Neurology module score in clinical stage and CBT competence test. The main assessment form in undergraduate stage is more similar and relevant to computer based test (CBT), emphasizes cognitive aspect by using multiple choice question. Otherwise, the main assessment form at clinical stage emphasize psikomotor aspect.

Conclusion: Undergraduate stage have better correlation to competency test score than clinical stage.

P-203 Medical student reproduction grades before and during pandemic era of COVID-19: Is there a significant difference?

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Background: The pandemic era of COVID-19 changed a huge alteration of arrangement in life, including the learning process in Medical Education. The Reproduction Block learning process comprises lecture sessions, Problem Based Learning classes, and laboratory activity. The final assessment includes grades collected from the above-mentioned activities.

Aim of study: To evaluate the difference between Medical Student achievement in the form of Reproduction Block Grades before and during the pandemic era of COVID-19.

Method: It was a retrospective cross-sectional study. Data were collected from student's grades of Reproduction Block, Study Program Medical Education Faculty of Medicine Hasanuddin University. Periods of observation were before the pandemic era (2018 and 2019) and during the pandemic era (2020 and 2021). Student's grades were classified according to Hasanuddin University grades classification as A, A-, B+, B, B-, C+, C, and E which were equivalent to 4.00, 3.75, 3.5, 3.00, 2.75, 2.00, and .00, consecutively. The study was approved by the Ethical Committee for Human Research Faculty of Medicine at Hasanuddin University. Statistical analyses were using Mann-Whitney U tests.

Results: There was a total of 1202 student's grades, which were divided into two groups of student's grades: before the pandemic era (635) and during the pandemic era (567). There was no statistically significant difference in student's grades with a p-value of .390.

Conclusion: Student's grades before and during the pandemic era of COVID -19 had the same output.

P-204 The evaluation of anatomical study due to pandemic COVID-19: An experimental study

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Background: Anatomical study in pandemic covid-19 era has a gross changing. The students could not learn human anatomy using cadaver. In adaptation into distance learning, teaching and evaluation of studying anatomy using 2 dimensions picture. However, this online learning programs result has not been yet to be investigated. Indeed, this pandemic era may inform us if such approaches can make an appropriate learning achievement.

Aim of study: We aimed at investigating the evaluation of anatomical study with different assessments, the difference study result using illustration picture and cadaver picture. We are also investigating the difference study result between online and offline learning method.

Method: The online learning students learnt and tested by 2 different picture, one group tested with illustration picture and the other with cadaver picture. The offline students learnt and tested using cadaver. The study result of online learning compared with the offline learning. The mean of the groups will be analyzed using test.

Results: The mean of online students tested using illustration picture higher than tested using cadaver picture, with significant differences (P = 0.00). The mean of online students tested using cadaver picture equal with offline students tested using cadaver, with no significant differences (P = 0.19).

Conclusion: The online assessment using illustration picture has a better result than cadaver picture. There is no difference between offline and online learning methods in the anatomical study result. Both of these findings should reassure the lecturers to use format for their learning and examination method, and also considering the representation of student's knowledge and understanding anatomical sciences.

P-205 Exploration of student knowledge of hard skills and soft skills in medical education at faculty of medicine Baiturrahmah University

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Background: Medical education is academic learning that is carried out based on learning at the university. Learning experiences during lectures must be able to improve hard skills and soft skills in a complementary learning process. Development in building a character is called soft skills.

Aim of study: To explore the knowledge and development of students about hard skills and soft skills at the Faculty of Medicine in Baiturrahmah University.

Method: The type of study design was to carried out using qualitative phenomenological methods that explore students knowledge of hard skills and soft skills. The sampling technique used a judgmental sampling method. Document study that regulates hard skills and soft skills in medical education of Baiturrahmah University, open-ended questions to 10 respondents. The criteria for research respondents are students undergraduate and professional programs in 2016 and 2017 whom incumbent in the structural organization and has completed his tenure in the structural organization of student, focus group discussion with the total responden (N=6) selected from unique answer given in open-ended questions and in-depth interview with same respondent from focus group disscussion the totally (N=6).

Results: Medical students have a good knowledge of hard skills and soft skills that they have acquired during lectures and in the organization shown by given answer in open ended question. Medical students can differences between interpersonal and intrapersonal skill in soft skills and know the importances of hard skills and soft skills as medical students from focus group discussion. The regarding and development of students on soft skills and hard skills that are obtained are sufficient known from given answer in in-depth interview that implemented.

Conclusion: This research concluded that academic regulation of medical faculty in Baiturrahmah University support students in improving the ability of hard skills and soft skills. Student activists from the Baiturrahmah University Medical Faculty realize how important it is to have hard skills and soft skills as a future doctor. Medical students should have capabilities of hard skills and soft skills which they acquire from academic or non-academic activities to be a five stars doctor.

P-209 Remote suturing skill training using simulation and video conference

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Background: Training of suturing skill is an integral part in medical education. Traditional training of suturing skill involves face-to-face interactions and mentoring between instructor and the students through simulation and direct observation of the performance. With the pandemic that has lasted for almost two years and the increasing restrictions of working time and offline meetings for students, a decrease in suturing skill competence is expected. A migration towards remote suturing skill training is a proposed solution.

Aim of study: This study aims to report our experience in conducting remote suturing skill training utilizing various simulation models.

Method: We developed remote suturing skill training using a video conference platform with positioned webcams and smartphones. Various simulation models were used as suturing pads; a rubber-based synthetic pad, a silicone-based synthetic pad, and an organic pad from ox tongue. Participants were medical students, general practitioners, and plastic surgery residents. Seventy-five participants followed the training. Instructors were plastic surgeons. Questionnaires were given to both the participants and instructors.

Results: We successfully conducted remote suturing skill training. Each participant and instructor used two video sources with different angles on their suturing pads from the webcams of their laptops and their smartphones. All participants were able to learn the suturing skill remotely and follow the instructions in real time. Three participants were having difficulties in following the training steps due to poor internet connection. All participants agreed that the method was useful to increase their suturing skills and they had more confidence in performing suturing on real patients after the training.

Conclusion: Remote suturing skill training using simulation and video conference has facilitated the continuity of medical education during this period of pandemic. This method is inexpensive and provides students with interactive learning experience. This method has potential to achieve competency-based outcomes in medical skill education.

POSTER PRESENTATION GROUP 3

P-301 Demystifying neurophobia and stigma: A qualitative analysis on preclinical students' reflection of learning neuropsychiatry

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Background: The field of neuropsychiatry can be challenging for medical students. The term 'neurophobia' emerged as students regarded neurology as a complex and difficult field, while psychiatry has suffered from stigmatization and perceived lack of scientific clarity. However, data on Indonesian medical students' perception of neuropsychiatry has been lacking.

Aim of study: To explore preclinical students' perception of learning neuropsychiatry.

Method: At the end of a 5-week neuropsychiatry problem-based learning course in 2020, medical students of Jember University were requested to complete an online questionnaire inquiring about their impression of neuropsychiatry before the course, aspects learned during the course, and their feedback for the course. Data were thematically analyzed.

Results: 149 students (6 retakers; 72,48% females) completed the questionnaire. They described the field as fun, interesting, different, vast, detailed, unpredictable, strange, difficult, confusing, and highly relatable. Students welcomed the well-organized schedule, the responsive and friendly teaching team, the interesting scenarios, the closing lecture where the whole teaching team gathered and clarified students' inquiries, the adjustable and well-structured learning videos, the attractive gamified practice sessions, their improved perception about stigmatized diagnoses, and the chance to provide feedback for the course. However, students also criticized the high course load and complexity, difficulty in understanding new terms and establishing diagnoses, the unidirectionality of several lectures, and few sudden changes in the course schedule. Students expressed their wish to have better technological support for the online sessions, to join the course offline instead of online, more interactivity and exposure to case or field studies, better scheduling of the activities, better clarity and conciseness of the teaching materials, better transparency of the evaluation results, chances of remediation, and to be able to professionally apply the knowledge and skills they obtained.

Conclusion: While acknowledging the complexity of the field, students felt benefited from the neuropsychiatry course.

P-302 The correlation of adversity quotient towards the academic stress in the first year of medical student of Muhammadiyah University Semarang

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Background: Medical students have higher stress academic levels compared to other faculties. Academic stress and effects that arise not only depend on the size of the stressor, but also determined by the degree of a person's vulnerability to stress. One's vulnerability to stress is influenced by Adversity Quotient, which is an intelligence that can utilize stressors through the concept of problem assessment.

Aim of study: This study aims to determine a relationship between Adversity Quotient with the incidence of Academic Stress in the first year students of the Faculty of Medicine, University of Muhammadiyah Semarang

Method: Quantitative, observational analytic research with a cross-sectional approach. The instruments used were scale for Assessing Academic Stress (SAAS) and Adversity Response Profile (ARP). Bivariate analysis of Adversity Quotient on Academic Stress was tested using Pearson correlation test. The research sample was FK UNIMUS first year students taken with the total sampling technique.

Results: The sample in this study were 142 respondents. The results of bivariate analysis of Adversity Quotient on Academic Stress showed the results of r = -0,464, and p-value = 0,000. There is a significant relationship with the direction of the negative correlation, and the strength of the correlation is moderate.

Conclusion: The higher a person's Adversity Quotient, the lower the level of academic stress, and vice versa.

P-303 Web conferencing for online learning: The trigger of Computer Vision Syndrome?

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Background: Restrictions on activities due to pandemic situation have made most routine activities such as work and education carried out online. Web conferencing has emerged as a new trend to support the implementation of online activities including learning. The use of web conferencing triggers high computer screen exposure. Excessive exposure to computer screens can cause damage to the sense of vision. Complaints that often arise such as eye fatigue, blurred vision, temporary blindness, headaches and stiffness in the neck and shoulders. Discomfort in the eyes due to the use of computers has a proportion that is directly proportional to the length of time a person uses a computer.

Aim of study: This study examines the impact of using web conferencing on CVS during online learning during the pandemic.

Method: This research was conducted at Faculty of Medicine and Health, University of Muhammadiyah Jakarta in March-June 2021. This study used an observational analytic approach with a cross sectional design. The dependent variables studied were CVS and duration of exposure to web conferences. Measurements were carried out using a questionnaire in the form of a checklist of complaints with a Likert scale of 1-4. The duration of exposure to web conferences is an independent variable measured using a questionnaire. This questionnaire was filled out by yourself using an online form. There were 288 medical students involved as research subjects who were selected using the consecutive sampling method.

Results: The results of the Chi-square test analysis showed a P-value of 0.003 which means that there is a statistically significant relationship between exposure to web conferences and Computer Vision Syndrome.

Conclusion: There is a significant relationship between exposure to web conferences with Computer Vision Syndrome.

P-304 Medical student perception of the learning environment and stress level response to the Covid-19 pandemic: A single perspective

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Background: Responding to the COVID-19 pandemic, Indonesian medical schools made swift changes that keep maintaining the learning environment.

Aim of the study: The purpose of this study was to collect medical student perceptions of the solely online learning environment and their stress level and also to provide suggestions to inform medical schools' responses during the continuation of this pandemic and the next

Method: Between October and November, 2020, the authors distributed a 50-item questionnaire that assessed demographics, learning environment, and stress level. Likert-type items were analyzed on an item-by-item basis.

Results: A total of 69 medical students (of 100; 69%) responded. Those who responded had positive perceptions of the online learning environment with moderate stress level. The most stressors experienced by students were academic-related stressors (ARS) while teaching and learning related stressor (TLRS) came in second.

Conclusion: These findings provide insight into medical student perceptions of their learning environment and stress level as they acclimated to changes resulting from the COVID-19 pandemic. Results can help inform the medical school during the continuation of the COVID19 pandemic as well as during future pandemics. Follow-up surveys of medical students at multiple institutions across the Indonesia and the other developing countries will be essential to better characterize student perceptions.

P-305 Relationship between depression, anxiety, and stress with the medical student's academic achievement index of Baiturrahmah University class of 2017

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Background: Medical education in Indonesia aims to produce doctors who are under the needs of public health services. To achieve this goal, the Faculty of Medicine must develop a curriculum based on the Indonesian Doctor Competency Standards. It makes medical students have a heavier burden than other faculty students. Students faced a significant academic burden, such as lectures, practicum, skill labs, coursework, and campus organization. They also faced demands from the environment, such as a social adjustment in the campus environment, relationships with peers. If not accompanied by strong internal factors such as personality and religion, it can cause emotional mental disorders such as stress, anxiety, and depression. Mental emotional disorders can interfere with academic performance, competence, professionalism, and health.

Aim of the study: This study aims to see the relationship between anxiety, depression, stress with the academic achievement index of medical students of Baiturrahmah University class of 2017.

Method: This research is an analytical study using the cross-sectional method. The assessment of depression, anxiety, and stress symptoms used the DASS questionnaire, while the Grade Point Average (GPA) was assessed from the Student Study Result Card.

Results: The study was conducted from the 2017 batch of the Baiturrahmah University Faculty of Medicine. Respondents consisted of 20 male students and 63 female students. The achievement index of most respondents is without designation (54.2%). Based on depression symptoms, most of the respondents had mild depression (47%), moderate level of anxiety (55.4%), and normal stress (75.9%). In this study, we found that there was no relationship between depression and achievement index (p: 0.898), no relationship between anxiety and achievement index (p: 0.241), and no relationship between stress and achievement index (p: 0.885).

Conclusion: In this study, there was no relationship between depression, anxiety, and stress with the medical student's academic achievement index of Baiturrahmah University class of 2017.

P-306 Learning physiology practicum in the era of pandemic Covid-19 through learning videos

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Background: The COVID-19 pandemic has not stopped learning in medical education. Various learning innovations continue to develop so that competencies can still achieve competencies. By Kolb's Experience Learning Cycle approach, the competency will be achieved by optimizing practice. Practical learning videos expect to make it easy for students to repeat the learning process, practice independently and repeatedly.

Aim of the study: This study aims to evaluate the use of learning videos in sensibility-themed physiology practicum at the Faculty of Medicine, Islamic University of Indonesia.

Method: We conducted this research in several stages:

1. Video Making
   Making a video starts with preparing the material, recording the process, and reviewing the video results related to editing, content, and video clarity.
2. Practicum Implementation
   The students send the video via google class room before the implementation of the practicum. The results of independent assignments are discussed during an apprenticeship with lecturers and assistants.
3. Evaluation
   The evaluation was carried out by giving a questionnaire in a google form to the students participating in the practicum.

Results: A total of 100 out of 169 students filled out the questionnaire. The questionnaire is divided into 3 categories, namely: how to use the video, the benefits of the video, and the satisfaction with the video. From these results, it can be seen that students use the provided videos optimally, feel that videos are very useful even though they have not been able to completely replace direct practicum, and by making good videos, students feel satisfied with the quality of the videos provided.

Conclusion: Through making good videos, the online practicum learning process during the COVID-19 pandemic can be optimized and its benefits can be felt for students.

P-307 Self Directed Learning Readiness (SDLR) of medical students in the e-learning implementation during COVID-19 pandemic at medical faculty of Malahayati University

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Background: Medical Education applied the concept of self-directed learning, which developed rapidly during the COVID-19 pandemic with the e-learning method.

Aim of the study: To determine the level of e-learning self directed learning readiness during the covid 19 pandemic.

Method: Quantitative descriptive research using a measured instrument modified from the Self Directed Learning Readiness (SDLR) Questionnaire adapted to the e-learning method implemented during the covid 19 pandemic. The total sampling was taken from the research population which was medical students of Malahayati University batch 2017, 2018, 2019 and clinical clerkship students.

Results: There were 762 respondents with the results showed that the majority SDLR e-learning levels of all medical students had a high category of 732 (96%). Based on batch of 2019 majority of medical students had a high category with 126 respondents (94.4%). The majority of 2018 medical students have a high category with 150 respondents (92%). The majority of 2017 medical students have a high category with 283 respondents (96.1%). The majority of clinical clerkship students have a high category with 203 respondents (100%).

Conclusion: SDLR's e-learning level of Malahayati medical student had the high category, and getting better according to the level of education and length of study of medical students.

P-308 Real challenges facing student engagement in online anatomy education during the Covid-19 pandemic

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Background: For a second year running, the Covid-19 outbreak has totally disrupted conventional teaching and learning of practical-based skills for healthcare students on a global scale. Yet in direct response to evolving challenges in student engagement, the pandemic has also totally transformed the approaches taken for planning and delivering anatomy education at many medical schools (Evans & Pawlina, 2021). Over this period, our preclinical students have intermittently expressed concerns about learning anatomy, due to campus restrictions and inability to handle lab specimens & models as well as anxieties over their own adaptive interactions needed to adjust to the new technology-mediated online format while working remotely from home.

Aim of the study: This study sought to obtain iterative feedback at regular intervals during the shaping of the new online anatomy program (Monash Malaysia Anatomy Practicals Online [MAPO]) to address preclinical student concerns about learning during the pandemic.

Method: Feedback, both written and verbal, was collected at regular intervals during the different phases of the online program to monitor student engagement in anatomy learning.

Results: Student learning concerns impacted all aspects of the MAPO program; pre-learning activities, group collaborative discussions, peer teaching demonstrations/presentations, tutor discussions, formative assessments and both self- and group-study. The anatomy coordinators ensured regular internal discussions on all student feedback, honest reflection and cohesive responses to the students as well as revision/ tweaking of the MAPO program delivery, as necessary.

Conclusion: Collection and analysis of periodic feedback on student engagement has proved very valuable in responding to preclinical medical student concerns on the teaching and learning of anatomy during the pandemic. Such student difficulties and anxieties are valid and real so their feedback should be taken seriously and serve to further inform the definitive shaping of any online medical education program, including MAPO.

P-309 Effectiveness of online learning systems on student learning outcomes of the Faculty of Medicine Universitas Muhammadiyah Semarang

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Background: Learning outcomes are the results obtained by a person after following the learning process. The learning outcomes obtained can be influenced by several factors, one of which is the learning system. In 2020, the Faculty of Medicine Universitas Muhammadiyah Semarang implemented an online learning system for the first time.

Aim of the study: This study aims to determine the effectiveness of the online learning system on student learning outcomes of the faculty of medicine University of Muhammadiyah Semarang.

Method: The study used a quasi-experimental method with a quantitative approach carried out at Unimus Medical Faculty. Samples were taken using the total sampling method from 2018 class students who took online learning and 2017 class students who took conventional learning in the 4th semester. Primary data were collected through questionnaires and from the academic section of FM Unimus. The data were analyzed with Mann Whitney.

Results: In the study, the number of respondents obtained was 258 students. The average GPA of 2018 students were 2.647 +- 0.50 SD, meanwhile 2017 students were 2.767 +- 0.48 SD, with a p-value of 0.013 (<0.05). The average GPA of students with online learning systems is lower than offline, so online learning is less effective than offline learning.

Conclusion: Online learning in the Faculty of Medicine Universitas Muhammadiyah Semarang, is still ineffective.

The 13th Jakarta Meeting on Medical Education (JAKMED) 2021 expresses sincere gratitude to the following companies for the support of this conference.