

ICME 2021 VIRTUAL CONFERENCE

ABSTRACT BOOK

Excellence in Health Profession Education; Through Globalization & Collaboration







April 01 - 04, 2021 www.icme-2021.com

Organizer:







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ABSTRACT BOOK ii

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ABSTRACT BOOK iii

MESSAGE FROM CHAIRMAN ORGANIZING COMMITTEE, ICME 2021

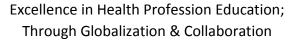
The process of reforms in medical education was initiated in North America soon after the publication of Flexner's report a little more than a century ago. The reform process had started much earlier in Europe. It was Netherland that led the reform process by introducing competency-based medical education and other regulatory measures in 1865. Reforms spread throughout Europe and were incorporated in Bologna Process for the unification of higher education across Europe in 1999.

While a great treasure of experience and knowledge in reforming Medical, or more correctly Health Profession, education collected in Europe and North America but the developing countries were left alone. This resulted in a dichotomy of education in developed and developing worlds making it difficult for the graduates of later to compete with those of first. It was soon realized that developing countries must also enter the process of reforms to end this disparity. For this, most essential was to benefit from the experience and experimentations by the developed countries.

Riphah International University established the Riphah Academy of Research and Education in 2006 to achieve this objective. The Academy initiated a series of workshops and lectures conducted in Pakistan by world-renowned experts in medical education. International Conference of Medical Education was the brainchild of its Chancellor Mr. Hassan Muhammad Khan: The mission of ICME is "to provide a credible platform for bringing together World-leading Experts on Medical Education and Educators from all over the world to prepare them to adopt recent innovations and standards in medical education so that the product from Institutions in their countries matches and competes with the product from similar Institutions in the developed world". This mission is well conveyed in the theme of ICME 2021, "Excellence in health profession education through globalization and collaboration". The first ICME was organized in 2009 in Islamabad-Pakistan. It was a great success and its recommendations were implemented by the Government of Pakistan, Pakistan Medical and Dental Council, and Higher Education Commission of Pakistan.

It was then decided that ICME shall also be organized in other developing countries so that they can also benefit. Until now ICME has been organized in UAE, Mauritius, and Turkey. This is the 7th conference of the series being organized in Indonesia. It is unfortunate, that the conference has been converted to a virtual conference because of the Covid-19 outbreak. But we expect that we shall be able to organize a physical conference in the same place once conditions normalize.

Masord Anwar Prof. Dr. Masood Anwar Riphah International University





ABSTRACT BOOK iv

MESSAGE FROM THE CHAIRMAN OF LOCAL ORGANIZING COMMITTEE ICME 2021

Alhamdulillahirabbill 'alamin, We could hold this International Conference on Medical Education (ICME) 2021 in the current pandemic situation. This conference is organized by Universitas Islam Indonesia, Riphah International University, and Forum Kedokteran Islam Indonesia (FOKI). Even though we meet virtually, We can still share our experience to strengthen medical education quality, such as the theme of the conference "Excellence in the health profession; through globalization and collaboration."

Approximately four hundred abstracts were submitted. Two hundred and ninety abstracts are selected to be presented at this conference. These abstracts derive from Health Education, Psychology, Science and other relevant fields. We encourage your very active and enthusiastic participation in this conference to learn much from each other.

We want to express our gratitude to all of the speakers for sharing their knowledge at this conference. We also would like to thank the participants for joining this conference. Our special thanks also go to the committee for the hard work to support this conference.

The committee has tried the best effort to prepare for this conference; However, if something happens beyond our control, we apologize. Please enjoy this virtual conference!

dr. Umatul Khoiriyah, MMedEd., PhD Faculty of Medicine, Universitas Islam Indonesia

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PLENARIES



Plenary 1

Paradigms in Assessment from A Historical Perspective

Cees van der Vleuten
Maastricht University, The Netherlands

The history of assessment has seen three different paradigms, each with its own conceptions and practice of assessment. The first paradigm is the most traditional one and probably the most dominant paradigm in educational practice around the world. In the assessment of learning paradigm all assessment needs to be objective and standardized. With competency-based education and work-based learning complex competencies needed to be assessed that could hardly be objectively assessed. In this assessment for learning paradigm the learning function of assessment is strongly emphasized. The focus is on the provision of meaningful feedback that allows informed self-direction by the learner. The third paradigm is the systems integrated approach to assessment that integrates elements from the first and the second paradigm. Programmatic assessment is an example of this paradigm. From each paradigm valuable lessons can be inferred. In which paradigm are you and where do you wish to go?

Objectives:

Providing a historic overview of assessment in medical education

Awareness of where assessment is going

Being familiar with fundamental lessons in assessment

Reflect on your own assessment culture in relation to modern approaches of assessment



Plenary 1

Technology-Enhanced Learning & Assessment

Vernon R. Curran
Memorial University of Newfoundland Canada

Many medical schools around the world have integrated online learning approaches using blended and flipped classroom models. Most recently, medical schools have been markedly challenged by COVID-19 with mandates to reduce physical contact and make all or most learning and assessment available online via distance/remote teaching modalities. This has resulted in massive adaptations in medical education, with major shifts from in-person teaching and assessment to online. For many medical educators and learners, this has been the first time that their teaching and learning has taken place online. This plenary talk will discuss different approaches for integrating online learning with in-person teaching in medical education, describe techniques and methods for facilitating engaging and interactive online teaching, and identify innovative approaches for integrating technology-enhanced tools in medical education assessment.

Objectives:

- 1. Describe blended, flipped and distance/remote models for integrating online learning approaches in medical education;
- 2. Discuss instructional methods and techniques for facilitating engaging and interactive online learning;
- 3. Identify novel and innovative approaches and tools for technology-enhanced assessment.



Plenary 2

Rehabilitating Subjectivity's Reputation: How to Use Judgment Effectively When Assessing Health Professional Trainees

Kevin W. Eva The University of British Columbia Canada

The assessment of healthcare professionals is a critical determinant of patient safety and healthcare quality, playing both a gatekeeping function and a path toward performance improvement.

Given the complexity of physician—patient interactions and the inadequacy of self-assessment for judging one's own strengths and weaknesses, medicine is dependent on the perceptions and perspectives of observers if its assessment practices are to authentically reflect good healthcare.

Such perspectives are susceptible to influences that range well beyond the performance observed, offering an opportunity to consider how cognitive psychology can guide improved practices and how exploration of psychological processes in real-world environments can inform understanding of cognition.

In this talk I will provide an overview of the challenges facing health professional educators, the insights that have been gained from the systematic study of rater-based assessment, and the application of cognitive psychology toward deriving solutions.

The literature to be summarized leads to the conclusion that performance-based assessment protocols stand a better chance of success when they are designed to accommodate human limitations of attentional capacity, working memory, and the idiosyncratic influence of prior experience rather than striving to change these fundamental aspects of cognition through rater/clinician training or response form alterations.



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Plenary 2

The COVIDIFICATION of Health Professional Education: Where Are We Going?

Chris Roberts*

*Professor in Medical Education, Sydney Medical School, University of Sydney, Australia

COVIFIDICATION describes the wide-ranging social changes being instituted globally in an attempt to reduce the spread of COVID-19. Whilst the pandemic has changed the way we live, and there has been rapid development in basic, clinical sciences, and health services research, has it really changed the model of health education that seeks to produce and nurture work ready health care professionals. Covidification has accelerated changes already in the pipeline in developed countries, and decimated progress in the rest of the world. In the depths of a social crisis, any number of futurists have speculated how health professional education may be fundamentally altered to deal with crisis the history of educators responding to change suggest that the fundamental issues are unlikely to change! As well as a torrent of new health education research inspired by adaptions to COVID, we also have a backlog of evidence-based initiatives that are not being translated into current practice and no obvious initiatives how change might happen at the policy level. Undoubtedly health professional education has been disrupted in this time of COVID, but this time of disruption has not happened in a vacuum. in reality there are a number of prevailing discourses capturing fundamental differences of the various stake holders as to what should be done. If we accept that changes that are taking place are superficial changes that reflect adaptation to the current circumstances, then to provoke meaningful change, we need to have an international conversation to critically think about the drivers for change in our discipline, the challenges of health care delivery, and develop a manifesto for change.



SYMPOSIUM



Symposium 1: International accreditation, collaboration, and globalization

Conceptual Model of Quality in Medical Education: A Qulitative Multiple Case Study

Titi Savitri Prihatiningsih
Associate Professor in Medical Education
Department of Medical Education and Bioethics, Faculty of Medicine, Public Health and
Nursing

Abstract

Background: Many authors have attempted to define quality. Since quality is deeply rooted in the manufacturing industry, many gurus in quality referring to this context when defining quality, from Deming, Juran, Crosby, Faigenbaum, and Ishikawa. When it comes to higher education, and in particular medical education, the question is could we use the same context and the same definition for quality? Medical education has particular characteristics that are very different from manufacturing industry. One distinct characteristic is medical education cannot be separated from the health care system. This study aims to build a definition of quality for medical education which takes into account its unique characteristics Methods: Literature reviews and qualitative method conducted in thre medical schools in three countries. Purposive sampling was applied. Constant comparative method was used for data analysis from the in-depth interview and the documents

Results: A model of quality in medical education is developed taking into account the context of the country with their health care and medical education system.

Keywords: quality, medical education, contex



Symposium 1: International accreditation, collaboration, and globalization

Implementation of Accreditation System in Gulf Countries and The Relation with The World Federation for Medical Education (WFME)

Hossam Hamdy Gulf Medical University, UAE

Abstract:

Accreditation in Higher Education for medical and health related programs started in the Gulf region since 20 years. With the important changes and quality assurance in higher education and in particularly in medical education, regulatory bodies have played an important role in this change. Accreditation and reaccreditation of programs became an important goal and task for all Universities.

In Medical Education, the Word Federation for Medical Education (WFME) played an important role towards ensuring that the accreditation agencies follow international standards when accrediting medical programs. The aim of this presentation is to emphasize the role of regulatory bodies national and international in initiating and supporting innovations, flexibility and contextualization of international standards and how they have responded to the disruption caused by COVID-19.

The presentation will focus on experience in the Gulf region.



Symposium 1: International accreditation, collaboration, and globalization

International Collaboration: Empowering Futuristic Medical Education and Research

Dr. Thamil Selvee Ramasamy Faculty of Medicine, Universiti Malaya

Abstract

The current *global* education and research landscape is changing rapidly than ever before. Recent global health crisis, COVID-19 pandemic, and many other in the past has established the need for efficient international collaboration and engagement in medical education, research and patient care. This requires precision internationalisation, in which framework mapping the alignment between national agenda on education and healthcare policies with international collaboration to empower futuristic medical education and research. International collaboration in higher education leads to breakthrough in knowledge, exchange of ideas and good practises, and lasting alliance between institutions and nations. In line with this, global networks and alliances, play a vital role in bringing such opportunity and engagement through many programmes including mobility, research funding, scientific and educational meetings. Looking beyond the pandemic, strategic and innovative technology and tools that enable hybrid teaching and learning, microcredentials, sharing of resources and expertise, e-mobility/internship for a holistic and vibrant education and research experience. This will prepare the next generation medical practioners and researchers to handle the global challenge such as pandemic effectively. This is an opportunity to rethink global cooperation to overcome barriers and global issues through international collaboration.



Symposium 2: Interprofessional education; best practice for implementation

Introduction to Interprofessional Learning in Health: How to Ensure That Learners Attain Interprofessional Capabilities

Gary Rogers
Professor of Medical Education, Deakin University, Australia

Abstract:

Interprofessional education (IPE) occurs when 'members or students of two or more professions learn with, from and about each other to improve collaboration and the quality of care and services' (Centre for the Advancement of Interprofessional Education, 2016). It aims to ensure that health professional graduates have the capabilities required for collaborative interprofessional practice (IPCP), which is becoming increasingly critical to the effective care and prevention of the complex health problems that face individuals and communities into the future.

There is broad agreement about the common set of capabilities that health professional graduates require in order to engage in effective IPCP but much less consensus about how learners may be assisted to attain these capabilities across their pre-registration health professional programs. This presentation will outline a three-phase programmatic pedagogical approach to IPE developed at Griffith University in Queensland, Australia. It will offer insights on how best to deliver programmatic IPE across a range of settings.



Symposium 2: Interprofessional education; best practice for implementation

Interprofessional Education: Best Practice for Implementation

Diantha Soemantri
Associate Professor in Medical Education, Universitas Indonesia, Indonesia

Abstract

Interprofessional education is required to equip healthcare professions students with the ability to work in a healthcare team. The collaborative competency consists of knowledge, skills and attitude domains which can be taught and assessed. Universitas Indonesia has implemented interprofessional education since 2012 in which five schools are involved, i.e. medicine, dental, nursing, pharmacy and public health, under the organization of Health Sciences Cluster. This presentation will highlight the running of IPE in Universitas Indonesia, both in the preclinical and clinical phases, along with its best practices and areas for improvement. Aside from IPE, Universitas Indonesia is also running several multiprofessional courses which set the standard of a set of common competencies necessary for all health professionals.

This presentation would also like to highlight the scholarship related to IPE in Universitas Indonesia, which include some research conducted to examine and evaluate the practice of IPE and resulted in several publications, both textbook and journal articles. This scholarship is not only as a part of an effort to establish the contribution of Universitas Indonesia within the IPE community of practice, but also as a part of a continuous improvement cycle of the IPE program since research findings could inform the curriculum development and implementation.

The reflection upon IPE development and implementation in Universitas Indonesia will of course be grounded on the latest theories and evidences regarding IPE in the literature. Therefore, this presentation will also examine the latest trends in IPE around the world and draw important lessons to be applied and modified to match the local context.



Symposium 2: Interprofessional education; best practice for implementation

Enhancing IPE in Midwifery Programme Universitas Airlangga: A Lesson Learned

Farida Fitriana Lecturer of Airlangga University, Indonesia

Interprofessional Education (IPE) occurs when two or more professions in health and social care learn together during professional training. It has many benefits, such as enhancing patient safety, decreasing medical errors, decreasing patients' length of stay, optimizing health outcomes, and improving health services. Enhancing IPE in Midwifery Program Universitas Airlangga has been held from two aspects, internal and external aspects. From internal effort, Interprofessional Education in Universitas Airlangga has begun in 2016 and continued intensively until now, involved more than 2011 students in total from a range of faculties. Universitas Airlangga has formulated IPE into three settings, i.e. IPE in the community setting, clinical setting, and academic settings. In the midwifery program, IPE in the community setting held in Community Health Centre, and community in clinical setting held in Universitas Airlangga Hospital. IPE modules consist of HIV/ AIDS; Patient safety; Outbreak; Disaster Management; Narcotics, psychotropic, and other addictive substances. From external effort, the initiation of IPE in Midwifery Program since Australia Awards Fellowship (AAF) Program in 2013, then 2014, 2017, and 2018. The goal of AAF is to enhance clinical practice, simulation, and practice, which overarching with interprofessional education and collaboration. Although some challenges need to be overcome the development of IPE needs to be continued to improve health services.

Keywords: IPE, midwifery



Symposium 2: Interprofessional education; best practice for implementation

From Inter-Professional Education (IPE) to Inter-Collaborative Practice (ICP): UI Experience

Melissa Adiatman

Lecturer Faculty of Dentistry, Inter-Faculty Committee, Health Sciences Cluster, Universitas Indonesia

Interprofessional education happens when students, or members from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes and services. Interprofessional education is a crucial step in before entering intercollaborative practice in healt care settings. Efforts needed to be made educate and prepare the students to equipped them with competencencies that will help them to work in an interprofessional collaborative team. Collaborative practice happens when multiple health workers from different professional backgrounds work together with patients, families, caregivers, and communities to deliver the highest quality of care. Universitas Indonesia implemented IPE modules since 2013 and ICP since 2015. Many factors contributed to the success of the implementation, and many obstacles needed to be tackled. To implement the modules of IPE and ICP a wide series of preparation needed to be done, such as: getting supports from the health-related faculties top management; identifying and supporting influential leaders; the resolve to change the culture and attitudes of the students and the lecturers; a willingness to update, renew and revise existing curricula; appropriate regulation that eliminates barriers to collaborative practice. After the modules are implemented for several years, this presentation will share with you the lessons learned and how we should improve the implementation in the future



Symposium 3: Ethical issues in education, learning environment: Islamic Perspective

Islamic Approach Towards Ethics and Morality in Education Context

Prof. Dr Anis Ahmad Vice Chancellor, Riphah International University, Pakistan

Islamic texts underscore centrality of education and learning. The former is called tarbiyah while the later is defined as learning culminating in hikmah. Hikmah is more than what the term sophia stands for. Hikmah involves human initiative and guidance from beyond. An appropriate learning environment reenforces process of education, tarbiyah and hikmah (wisdom). Universities are the breeding ground for the both. However, the materialistic and empiricist world view assigns primacy to the material gains, output and market needs driven education and a race for technological excellence and global leadership in technology. This has marginalized focus on ethical and moral development of personality, character building

Universities have to consider an ethics centered approach to produce research and human resource, imbued with moral conduct and humanized technological programs instead of a technoculture, making human beings subservient to robotics and AI.

This paper makes an effort to identify Islamic principles which help in production of human friendly technological development.

Keywords: tarbiyah, hikmah, qudwah, maslahah-'amah, al-maqasid, objectives of humanity.



and learning leading to wisdom (hikmah).

Symposium 3: Ethical issues in education, learning environment: Islamic Perspective

Medical Ethics in Islamic Perspective

Jurnalis Udin Chairman of the YARSI Foundation, Indonesia

There will be two approaches dealing with medical ethics issues, secular or UNESCO approach and Islamic approach. At theoretical level, there are only four principles which are: autonomy, non-maleficence, beneficence, and justice. On the other hand, Islamic ethics draws its legitimacy from the Quran or Devine revelation (wahy) and the Prophetic Sunnah. There will be five kinds of law: good and permissible (halal), recommended (sunnah), desirable (mubah), dislike (makruh), bad and impermissible (haram). In short, we don't use terminology as suggested by UNESCO: ethical, not ethical, moral, immoral, amoral, legal, illegal etc. Aside of the Quran and Prophetic sunnah (hadith), we have also other compulsory references: purpose of law (maqasid al shari'ah) including preservation of religion, preservation of life, preservation of intellect, preservation of progeny, preservation of wealth; and principle of fiqh (qawa'id al fiqh) including the principle of intention, the principle of injury, the principle of hardship, the principle of custom or legal precedent, and the principle of certainty.



Symposium 3: Ethical issues in education, learning environment: Islamic Perspective

Sharing Patient Information On Medical Education: Ethics and Confidentiality

Pukovisa Prawirohardjo Lecturer in Neurology, Universitas Indonesia, Indonesia

Abstract

Professional values form the basis of ethical codes principles. The core ethical principles of beneficence, nonmaleficence, autonomy, and justice are to be hold in facing such ethical issues, nonetheless in education and learning environment. Amidst the growing concern in education and learning opportunities, classical ethical problems still remain to this day in most countries, particularly a part of injustice. As such are large disparities in educational attainment, either it is due to discrimination, caste and politics, or it is due to nepotism and favoritism. Medical learning environment is no other exception, moreover in normalization of bullying as a "hidden" curriculum, also violating the professionalism values. The concept of justice in Islam is deeply rooted within, as The Prophet Muhammad SAW versed Allah SWT saying "O My Servants, I have forbidden injustice upon myself and have made it forbidden amongst you, so do not commit injustice." Islam is upholding *qist* (fairness) which entails equality and justice, just inclined with the core principles of ethics. Should the ethical issues in education and learning environment be addressed, injustice is one of the major root problems, bearing equal and equitable access to educators, education materials, treatment, and even learning achievement.

Keywords: ethics, education, injustice, discrimination



Symposium 3: Ethical issues in education, learning environment: Islamic Perspective

Ethical Issues in Medical Education, Learning Environment: Islamic Perspective

Ariff Osman Professor of Medicine, International Islamic University, Malaysia

Abstract

A holistic medical education is necessary to nurture medical students to become competent professionals with the requisite skills, knowledge, competencies and mind set as safe doctors. Medical teachers are tasked to guide, nurture and motivate their students to understand, internalize and actualize the educational objectives and outcome of education. A professional and personal development curriculum is desirable to achieve these objectives, which shall conform to each institution's philosophy, vision and mission. The professional competencies to develop are professionalism, leadership, management and teamwork, decision-making skill, particularly in resolving ethical dilemmas, counselling, as well as having good grasp of basic law and ethics. These are the desirable competencies of a safe doctor that medical students need that would enable them to provide holistic patient care; physically, emotionally, psychologically and spiritually.

However, the main ethical issue and challenge in medical education is to develop graduates or future leaders who are professionally competent and at the same time are adaptable, balanced, well-rounded individuals, who are willing and able to serve humanity as change agents in respective communities such as through entrepreneurship agenda, both profit making or social business. It requires conducive learning environment such as entrepreneurship ecosystem, dedicated teachers/trainers, realistic and respectful institutional governance. The International Islamic University Malaysia (IIUM's) experience is an example of how the Islamic perspective of medical education that support the educational journey of professional and personal development of future doctors and leaders is realized. The missions of islamisation, integration, internationalization for comprehensive excellence and the philosophy of igra and rahmatan lil a'lamiin (mercy to all mankind) are embedded in teaching and learning, research, community engagement, entrepreneurship and other activities.

Keyword: Medical education; Safe doctors; Professionalism; Leadership; Entrepreneurship



Symposium 4: Community based education

Immersive Learning in Community-Based Settings: An Integrated Approach to Designing a Task-Based Medical Student Micro-Curriculum

Prof Chris Roberts*, Dr Linda Taoube, Dr Priya Khanna Sydney Medical School, University of Sydney

Introduction:

There are well established benefits to early clinical exposure of medical students to various community-based education settings. As well as improving clinical skills in dealing with diverse clinical encounters, such placements seem to positively impact professional development skills including critical thinking and teamwork. Sydney Medical School's new curriculum provides an opportunity for year 2 students to undertake placements in general practice, pharmacy, radiology, and allied healthcare settings in two 8-week blocks (one day/week). Whilst senior medical students have long been undertaking placements in general practice, it is novel that community-based placements have been introduced for junior medical students to compliment traditional hospital-based learning

Aim:

To describe the underlying design and blueprint of an integrated task-based micro-curriculum for community-based learning, and explore stakeholders' perceptions about its relevance, feasibility and educational impact.

Method:

Informed by a system thinking framework (soft systems approach), and guided by contemporary curricular theories, a task-based approach underpinned the curricular design. Alignment with relevant national level documents and curricular framework was ensured. Assessment is work based. Consultations and workshops with internal and external stakeholders (students, practitioners, and academics) were undertaken to refine and validate the task-based approach prior to implementation

Results:

The task-based design and underlying blueprint were perceived favourably in terms of tasks being relevant, authentic, feasible, and facilitating self-directed experiential learning. The blueprint was found to be horizontally integrated within the year 2 curriculum, and vertically integrated with year 4 general practice placements, with potential of spiral integration in terms of increasing task complexity and autonomy.

Conclusion:

The micro-curriculum designed for early clinical immersion in non-hospital settings is a novel innovation for junior medical students. The evaluation has been extended to capture implementation including recruitment of placements and practitioners. Based on our data, it is anticipated the approach can be adapted to other community based educational settings taking account if local contexts.



Symposium 4: Community based education

The Experience and Lesson Learned of Cbe Implementation in Universitas Muslim Indonesia

Prof. dr. Syarifuddin Wahid, PhD., SpPA(K), DFM Dean of Faculty of Medicine, Universitas Muslim Indonesia

Driven by the need for medical education institutions to reflect on the future health system and to ensure that doctors acquire the appropriate competencies, reforms have been made in the world of medical education. One aspect that is emphasized is balancing institutions and hospitals by using the community and primary services as the learning environment. This is also in line with the main vision of the study program, namely strengthening community medicine that is imbued with Islamic values.

CBE refers to medical education based outside of a large tertiary or secondary hospital. Community-based education programs demonstrate a curriculum that is based on addressing the health needs of the local community. Here students are faced with public health problems and are prepared to work in that community. This approach has been carried out at FK UMI in recent years with various experiences and lessons learned.

The setting and structure of CBE are principally determined by the objectives of the curriculum components to be presented, whether at the academic or professional stage. Most of the CBE programs at FK UMI aim to support early clinical exposure. At the academic stage, it is carried out through activities such as field observations at several healthcare settings in several blocks, the Community Service Program, social services, and fostered villages program. Meanwhile, at the professional stage, it is carried out through a rotation at community health centers which is carried out in all departments with the proportion of weeks around 30-40%. Some of the activities carried out are education (GERMAS), homecare services, and direct involvement in primary health services.



Symposium 4: Community based education

Lesson Learned: Community Based Education (CBE) in the Nursing Education

Ema Madyaningrum^{1*}

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Abstract

Community Based Education (CBE) in nursing is one of strategy to improve quality of nurse education. Introducing students with CBE is important to provide early exposure in the community setting. In the school of Nursing, Faculty of Medicine, Public Health, and Nursing; Universitas Gadjah Mada, in the traditional curriculum, the students face experience in community activities in the internship stage. However, the Association of Indonesia Nurse Center (AINEC) was encouraged to develop CBE in the early stage. The aim of this program is to identify and to evaluate the CBE in school of nursing. During the ten years, we have changed our curriculum twice in academic stage. In the current curriculum, the students have been introduced to learn activities in the community setting in academic stage since the first year. They visited individual clients, some families, specific group in the community. In the internship stage, especially in community health nursing, we have changed curriculum three times. The first, we integrated nursing students with the medical students. The second, we integrated the nursing students with the medical student and some students from nonmedical students. Lastly, we did not integrate the nursing students with any other students. The benefit of the curriculum development, the student's confidence increases when facing client in the different setting. This program provides challenge for students to develop communication skills, leadership, and innovation in health system in the future.

Keywords: Community Based Education, curriculum, community health nursing.



Symposium 4: Community based education

The Experience and Lesson Learned of Community-Based Education Implementation in Andalas University

Prof. Dr. Rizanda Machmud, MD, MPH
Public Health Post Graduate Program Faculty of Medicine Andalas University

Abstract

Background. Health Professions Education should be more socially relevant and more responsive to community health needs at all levels. It based on the question how an educational program can be effectively organized to ensure that its fundamental purpose be achieved - educate health care providers; advance knowledge through research and provide care to the communities they serve; and become part of health-education system integration to provide best health outcomes to society.

Aim. We need to reshape our curricula not only community-based education but also embedded though academic health system and be implemented in health care system, a concept of integrating education and research in a symphony of health service delivery. The aim integration to provide best health outcomes to society through health education and translational research that will impact to the continuous quality improvement for healthcare. The organizational network that consist of medical and health faculties, primary health care, teaching hospitals, research institutes, private sectors, and/or local government, that become part of health-education system

Action. To achieve the goals, faculty of medicine Andalas University is setting on the education program through undergraduate program, medical profession especially in public health department, and post graduate public health study program, tried to shape the programs, that are the strategies employed, the educational processes, the organizational structures and their relationship with overall health system.



Symposium 5: Aiming towards effective student assessment - a global perspective

Open-book Versus Closed-book Test: An Evidence Based Experience for Logical Decision of Approaches in Students Assessment During COVID pandemic

Shahid Hassan
IMU Center for Education, International Medical University, Malaysia

Prior to COVID-19 crisis, less concerns were shown for Open-book Exam (OBE) and traditional Closed-book Exam (CBE) with invegilation were often held in classroom or computor lab. OBE as online synchronous or online asynchronous with open-web has widely been used during the COVID pandemic. Controvercies associated with OBE such as being easier, of poor discrimination and higher pass-rate in exam was studied using statistical method of One-way ANOVA, ANCOVA and PBS correlation. We evaluated the data to collect evidences to make a logical decision to adapt a quality assessment, which is fair, reliable and valid. The analysis suggest a significant difference of the mean between CBE and OBE with and without proctoring. However, an effect size for its moderate value in our experience with multiple analysis concluded that practicing assessment with OBE aproach if the Covid pandemic continues would be feasible. To further improve, questions structured to test high order thinking, effective proctoring and regular evaluation will be important to practice OBE with continuing quality improvement. The current study outcome is comparable with mixed literature findings interprtation.



Symposium 5: Aiming towards effective student assessment - a global perspective

Enhancing Assessment Experience for Effective Student Assessment

Associate Professor Dr Muhamad Saiful Bahri Yusoff
Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia,
Kota Bharu, Kelantan, Malaysia.

Assessment is a process of judgments on individual student progress and achievement of learning outcomes. It covers classroom-based assessments as well as large-scale, external assessments and examinations in either physical or digital settings. The term assessment experience refers to understanding how assessment influences learning behaviours. The assessment experience is clustered into (i) quantity and distribution of student effort, (ii) quality and level of student effort, (iii) quantity and timing of feedback, (iv) quality of feedback, and (v) student response to feedback. Evaluating assessment experience will provide valuable insights into the effectiveness of an assessment system and be able to improve that assessment. Improving assessment experience will lead to effective student assessment in medical education.



Symposium 5: Aiming towards effective student assessment; a global perspective

"Assessment of Learning, For Learning and as Learning": Systematizing Effective Student Assessment in Medical and Health Professions Education from A Sociocultural Lens

Ardi Findyartini

Department of Medical Education, Faculty of Medicine Universitas Indonesia, Jakarta
Indonesia

The aim of medical and health professions education worldwide is to generate professionals who are fit for practice and able to strengthen global health workforce. Systematic assessment should be integrated in the curriculum to assure that students achieve the expected learning outcomes and competence. Despite increased awareness of the importance of assessment for learning or assessment aiming at providing feedback for students, some schools have been emphasizing more on assessment of learning or those aim at justifying the achievement. Assessment for learning, which considers students' personal progresses and multiple performance data points, is expected to be enriched by assessment as learning, where students have internalized the need of having continuous improvement and life-long learning. While best practices of assessment are globally recognized, a careful implementation considering local contexts is necessary. This talk will highlight challenges of implementing best practices in assessment: of, for and as learning, from a sociocultural lens. Hofstede cultural dimensions (2001) highlighting power distance, collectivist vs individualist, masculinity vs femininity, short terms vs long term orientation, uncertainty avoidance, and restraint vs indulgence will be used to analyze the challenges. Consideration of three cultural constructs: values, practices and artefacts will be integrated in the analysis. Therefore, this talk is expected to shed light on overcoming the challenges in implementing the best practices while still embracing local wisdom and values. In particular, this talk will also discuss the current and future assessment practice which include portfolio, feedback and mentoring. Assessment of, for and as learning is indeed required and should be systematized in the medical and health professions education curriculum.



Symposium 5: Aiming towards effective student assessment - a global perspective

Driving Lesson or Driving Test-Impact of Feedback

Associate Professor Dr Mona Hmoud AlSheikh
Department of Physiology, College of Medicine, Imam Abdulrahman Bin Faisal University,
Saudi Arabia.

A key responsibility of a medical school towards its graduating students is to prepare them for the medical licensure exam. In Saudi Arabia, a strong call by a large national group of educationists to adopt a Saudi national licensure in 2008 led to adoption of SMLE by the Saudi Commission of Health Specialty, an independent governmental agency soon after.

The Saudi Medical Licensure Exam (SMLE) is a multiple-choice question (MCQs) based online examination. It consists of 300 items which are aligned to the Saudi MEDs¹ competency framework. Students' performance in SMLE determines their eligibility to practice as a physician and/or a postgraduate trainee. It also determines the national ranking of their medical school. Unfortunately, the average score of our university graduates in SMLE was declining over the past couple of years. In follow-up surveys, students highlighted the need of practice exams and identification of the learning gaps on which they can work and improve. The objective of this paper is to describe how performance of our medical school graduates was improved in SMLE by giving timely detailed personalized learning outcome achievement feedback to candidates on 3 consecutive mock exams developed using the actual SMLE blueprint.



WHAT THE EXPERTS SAY



What the experts say? 1

What COVID-19 Can Teach Us About Health Professional Education Research

Kevin W. Eva

Director of Educational Research & Scholarship The University of British Columbia Canada

As Editor-in-chief for *Medical Education*, I wrote at the start of the pandemic that "with little capacity to foresee the future, the only claim I can make with confidence is that things will be different at the point you read this text, relative to when I wrote it." Now, a year later, I can confidently say that I was right in two very different ways: (1) things did change (and have continued to change) rapidly in ways that have been highly variable and dependent on individual circumstances; and, (2) I, like everyone else, am terrible at foreseeing the future.

In this talk I will offer reflections on how health professional education research has changed since COVID-19 began to run amok, paying particular attention to both matters of quantity and quality. In the former case, quantity, the pandemic's impact has been undeniable as journals the field over are reporting twice as many submissions now than ever before. This offers insight into the role education scholarship plays despite it often being perceived as undervalued by its practitioners.

In the latter case, quality, I will argue that COVID-19 has not done anything more than highlight a crucial distinction of which anyone who wishes to "do research" in health professional education should be aware - that between what we do research **on** and what we make research **about**. That is, what COVID-19 best teaches us is that it is far too easy to focus on the superficial details that define the platform (COVID in this case) on which research is performed to the detriment of improving understanding about phenomena of relevance even though such improved understanding is most likely to enable progress of thought and improvement of educational practice.



What the experts say? 1

The Future of Patient Safety in Dentistry; Adopting A Modern Approach for The 21st Century

Yawar Hayat Khan
Professor & Assistant Dean Medical Education, Riphah International University, Pakistan

The health issues of the 21st century span all the health sciences. Patient safety and quality are high profile in healthcare at the moment. It is essential for all health care practitioners and health care organisations to become more familiar with the general context of patient safety to actively participate in efforts to implement patient safety measures in daily practice and to establish a patient safety culture. The dental profession is committed to provide safe dental care which is necessary for ensuring good general health and aims to minimise risks and establish an open culture of patient safety in which practitioners can learn from their own and others' experience. Oral healthcare in the 21st century is characterized on one hand, by new technologies and knowledge that could transform dentistry, increase demand for state-of-the-art patient care, changing disease patterns and aging populations; on the other, by pressure to contain costs and improve access to care. Within this context adopting a modern approach to address these challenges is a top priority and holds a bright future and is increasingly recognized as means of achieving higher quality oral health care enhancing the effectiveness and efficiency of services.



What the experts say? 1

Lifelong Professionalism: Learning, Unlearning and Relearning Ensuring

Paul Barach
Clinical Professor at Wayne State University School of Medicine

"The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn" — Alvin Toffler.

Lifelong learning has been recognized and supported as one of the most significant competencies that physicians must possess. Lifelong learning offers physicians the opportunity to keep their knowledge current, learn new skills, and pursue a wide variety of interests through intellectual growth and expansion. To put it simply, all learning is unlearning. Physicians are expected to maintain a high standard of knowledge and ethical behavior; demonstrate a commitment to continuity of patient care; and demonstrate sensitivity to the age, gender, and culture of patients and fellow health care professionals. Medical organizations can become powerful engines of socialization to enhance patient safety and physicians' lifelong learning and commitment to medical professionalism. We propose that this promise can be realized if new or reformed hospitals and medical schools combine education and service delivery and institutionalize processes of truth telling, transparency, trust building, supported by deep individual and collective reflection. The resulting "institutions of reflective practice" will be collegial, experiential, and reflective of lifelong learning, unlearning and the relearning concerning the technical and normative aspects of medical work. We believe that these reformed medical institutions should balance the potentially conflicting organizational needs for, on the one hand, (1) self-direction, risk taking, and creativity; (2) specialization; (3) collegiality, and (4) agility; and, on the other hand, (5) organizational structure, (6) coordination of division of labor, and (7) hierarchy. The institutionalization of reflective practice would enrich clinical practice with education and education with practice, and accomplish the ideals of what many authors call "responsive medical professionalism." The medical profession should both contribute and be responsive to social values, and medical work would be valued intrinsically and as central to practitioners' self-identity, helping to combat moral injury, and as a contribution to the public good. There is an urgent need for renewal in supporting physicians committed to the proactive and persistent pursuit of excellence and the creation and sustainment of learning communities — through unlearning, relearning, and learning of new knowledge and wisdom.



What the experts say? 1

Role Model in Medical Education

Ova Emilia

Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

The value of role model in educating medical students are long has been acknowledged. Research shows, that almost all freshly graduated doctors remember their favorite role models who shaped their professional attitudes in their later life. Role modelling is underexploited, yet powerful, teaching strategy. Students can identify positive role models, and at the same time can determine any professional attitudes that is not favorable so should be avoided. Additional research has shown that exposure to physicians at various clinical learning environment affects career choices, changes learners' attitudes and promote acquisition of skills. Educators have suggested that students' "difficult times during medical training" may be alleviated by role models with appropriate attitudes. Therefore, faculty development aimed at role model training that reinforces empathy, compassion, and caring should be emphasized.

Clinical training is delivered by clinical preceptors in a defined learning environment, both of which are interdependent and complementary, and so it is sometimes impossible to discern between the influence of role modeling and that of the learning environment in general, and particularly of the hidden curriculum. The hidden curriculum affects the behavior of role models, which may be delivered to students. The hidden curriculum may negatively affect some clinical learning environments and may also facilitate undesirable behaviors, such as doctor-centered patient interviewing in order to save time; humiliating students as a misguided attempt to encourage learning; and making disparaging remarks about primary care physicians, epidemiologists, and psychiatrists in an attempt to promote a biomedical approach to patient care.

In this presentation, I address various definitions of role modeling and consider the educational value of role modeling, and the effect of learning environment and lastly how to improve role modeling.



What the experts say? 2

Leadership Competency Model-Drenica: Generalizability of Leadership Competencies

Fadil Citaku

Professor of Leadership & Emotional Intelligence, Academy of Leadership Sciences Switzerland (ALSS), Switzerland

This talk focuses on generalizability of leadership competencies published in field of leadership. This present study used the Leadership Competencies Model of Çitaku et al. (2012), which has investigated six most developed western countries (Austria (A), Germany (D), Switzerland (CH), United States of America (USA), Canada (CA) and United Kingdom (UK)) to find out leadership competencies for efficient leaders. We randomly selected 25 leadership competencies using the Research Randomizer tool and systematically researched on Google Scholar, how many times occur leadership competencies, published between the 2010 and 2020. The analysis of the related literature was conducted by employing a bibliometric analysis of the research on the Google Scholar database between 2010 and 2020. The results of present study showed that there is an outstanding interest in our randomly chosen leadership competences and that these 25 competencies can be applied in any leadership domain. The study brought out 25 important leadership competencies incorporated in seven important domains, resulting with leadership competencies model named DRENICA, which is scientifically robust and can be used in leadership training courses and programs, in all leadership domains. The study concluded that 25 randomly chosen leadership competencies are robust, generalized and can be used in any leadership domain.



What the experts say? 2

Assessing Curriculum viability: What is adds to the curriculum evaluation?

Rehan Ahmed Khan Riphah International University, Pakistan

Curriculum viability is the current state of a curriculum determined by the degree to which particular quality standards have or have not been met, and the inhibitors affecting the attainment of those standards. This talk focuses on Identification of these inhibitors through valid and reliable questionnaires and an approach to bridge the differences in perceptions of teachers and students about these inhibitors that can improve the quality of the curriculum and hence have a positive impact on the society.



What the experts say? 2

Assisting Students' Learning Through Self-Assessment

Umatul Khoiriyah*

Department of Medical Education, Faculty of Medicine Universitas Islam Indonesia

There is a paradigm-shifting in the assessment. Assessment is intended not only to evaluate students' learning but also to assist students' learning, called "assessment for learning". One of the ways to conduct this assessment is using self-assessment. Self-assessment is a process by which students monitor and evaluate their learning and then identify the appropriate strategy to improve the learning gap. Self-assessment stimulates students to be self-regulated learners. By applying self-assessment regularly, students become more responsible to their own learning. Students monitor their learning progress and evaluate whether their performance is in accordance with their goal or the standard. Students also identify their next learning plan and take appropriate action to improve their performance.

Some ways could be conducted to increase the effectiveness of self-assessment. There are: 1) Increasing the relevance of the self-assessment on student's activities by applying self-assessment in specific learning activities continuously, 2) Increasing the students' engagement in the self-assessment process. Students could engage better if they understand the advantages of self-assessment and the way to apply it, 3) The availability of external validation such as a specific standard to compare the self-assessment results and feedback from the teacher and peers, 4) The opportunity for the students to revise their performance.



What the experts say? 2

How Scholars are Made in Health Professions Education?

Mohamed Al-Eraky

Associate Professor of Medical Education, Imam Abdulrahman Bin Faisal University, Saudi Arabia

"Do you have a topic for me, Doctor", said the postgraduate student to her supervisor. In response, the supervisor can choose the easy way, for both, by imposing a topic, a question and a methodology on the student. But scholars are made in a different way. Supervisors are expected to encourage students to take informed decisions with respect to their domain in health professions education (HPE) and advocate their choices. Some may pursue their passion, while others follow the emerging trends in the literature, without acknowledging their local context or their professional expertise. It's not easy to make a delicate balance above three drives; namely: passion, fashion All studies start with a literature review section, where authors provide background and context from previous studies, indicate the problem statement or gap in the literature and advocate the significance of the study. The corner stone of any study is the research question, because it guides the search protocol and dictate the methodological approach for data collection. After collecting a handful number of relevant papers in your library, it's essential to classify them into categories: (1) nice to read or skim, (2) good to read and (3) must read in-depth. Unfortunately, there's no short cut to skip reading and start writing. Artists are good observers, and likewise good writers are basically intuitive readers. Being a scholar is an art and a science. My talk will offer a quick guide on selection of topics, deciding your domain, literature review along with other tips to assist junior scholar in health professions education.



What the experts say? 3

E-Portfolios: The Good, The Bad And The Ugly

Zarrin Seema Siddiqui

Assessment Lead, Vin University, Vietnam

E-Portfolios are incorporated in the health professions education at all levels. Yet, they are not perceived as a useful tool by students as well as faculty for a number of reasons. Based on extensive experience of introducing E-Portfolios in a variety of settings and evidence from published literature, the presenter will highlight some key points to consider if an institution, program or a unit coordinator is considering introduction of E-Portfolios.



What the experts say? 3

Why Is It Important to Assess the Achievement of Interprofessional Learning Outcomes and How Can It Be Done?

Gary D Rogers
Professor of Medical Education, Deakin University, Australia

Appropriate assessment of interprofessional learning (IPL) outcomes is essential both to verify for the community that they have been attained and to convey to learners that this area of curriculum is valued by the institution. In 2016, a global consultative process was undertaken to derive an international consensus statement on interprofessional assessment, which was subsequently published in *Medical Teacher*. The presentation will consider the findings of this process and developments since. It will describe the methodologies available to educators for assessing IPL across health professional programs.



What the experts say? 3

Workplace Based Faculty Development; A Cognitive Apprenticeship Model

Rahila Yasmeen

Professor of Medical Education & Dean RARE, Riphah International University

Faculty development has become an increasingly important component of medical education, has a critical role to play in promoting academic excellence and is one of the mechanisms for improving the instructional competencies of faculty as medical teachers to adopt & adapt the medical education reform. Most of the faculty development approaches are being conducted away from the faculty/medical teacher's workplace and expecting from them to take their lesson learned and experiences from 'faculty development community' back to their own context. Literature review has revealed that faculty development approaches, which usually pulls the faculty/ participants out of their work environment, rarely address the challenges of 'transfer and applying of new learning/skill' at the workplace. Faculty development can occur in a variety of contexts and settings, and often begins with 'informal learning' at the workplace. By using the influence of 'workplace' as a learning environment for faculty development, a new model/approach (combination of formal & informal approaches) of faculty development has created named as 'cognitive apprenticeship model'.



What the experts say? 3

Artificial Intelligence in Healthcare: The Future is Now.

Samer Ellahham, MD Senior Cardiovascular Consultant, Cleveland Clinic – Abu Dhabi, UAE

Artificial intelligence (AI) is revolutionizing health care. The primary aim of AI applications in health care is to analyze links between prevention or treatment approaches and patient outcomes. AI applications can save cost and time for the diagnosis and management of disease states, thus making health care more effective and efficient. AI enables fast and comprehensive analysis of huge data sets to effectively enable decision making with speed and accuracy. AI is largely described to be of 2 types: virtual and physical. Virtual AI includes informatics from deep learning applications, such as electronic health records (EHRs) and image processing, to assist physicians with diagnosis and management of disease states. Physical AI includes mechanical advances, such as robotics in surgery and physical rehabilitation. Algorithms have been developed to train data sets for statistical applications to enable data processing with accuracy. These principles underlie machine learning (ML), which enables computers to make successful predictions using past experiences. Although both AI and ML can provide these advances, such technology also may raise safety concerns, which may cause serious issues for both patients and all other health care stakeholders.

Data privacy and security is one such concern because most AI applications rely on a huge volume of data to make better decisions. Strategies for safety of AI and ML in health care are evolving and are not yet fully developed.

Training is needed not only for Al-based systems but also for clinicians, who can be groomed as information specialists to further train and develop accurate and dependable Al solutions. Alaugmented clinicians should be more efficient and confident and not faced with the uncertainty of risks associated with technical advances in medicine. Physicians should understand, develop, adopt, and leverage Al to improve patient care. Efforts should be made to maximize the benefits of Al in health care. Experts recommend 4 critical aspects in this regard: quantifying benefits to enable measurement, building trust for adoption of Al, building and enhancing technical skills, and organizing a system of governance. Data protection legislation should be formulated and strengthened for the collection and processing of data in clinical research. With objective and demonstrable safety, Al can enable value-based and patient-centric health care. Quality standards for Al applications in medicine should be clearly defined to add value, accuracy, efficiency, and satisfaction to Al in health care.

Large feasibility studies and cost-effectiveness assessments can help improve adoption of AI in health care. Privacy, sharing, and disclosure of safety data relating to AI applications should be strengthened. High standards should be defined for validation of AI and ML applications in health care. Methods, guidelines, and protocols should be formulated to enable the safe and effective development and adoption of AI and ML in health care. Trust and training will allow the full functional integration of AI into research and practice in health care.



PRE-CONFERENCE WORKSHOPS



Pre-Conference Workshops 1

How to Assure Quality in Writing Manuscript for a Medical Journal

Kevin Eva¹, Zarrin Seema Siddiqui²

¹The University of British Columbia Canada, ²Vin University

Abstract

Writing for publication in health professions education is an important skill, essential in developing an evidence base of practice, for broad dissemination of findings and raising the quality of healthcare education. Peer-review is a defining component of scholarly practice and proof of writing success is often a requirement for promotion when applying for funding and providing evidence of professional impact. However, for both novice and experts alike, writing for publication can be a challenging experience as competition for publication is fierce and the standards in the field continue to rise.

In this workshop Dr. Eva will share his experience and knowledge of the field of publishing. He will aim to provide participants with a better understanding of what makes a good paper, where the common pitfalls lie with respect to writing and submitting papers, and what goes on 'behind the scenes' of the publication process. The potential benefits of unravelling some of the mysteries of the submission and review process include an increased understanding of what it takes to publish in medical education journals specifically and the scientific literature more broadly.

Objectives

Workshop participants will be asked to consider the following questions and issues: (1) What problems are commonly encountered? (2) What makes a good paper? Why do papers get accepted or rejected? (3) What happens to a paper during the review process? (4) Issues of style; (5) Ethical aspects of publication.

Through this they will gain knowledge regarding what health professional education research journal Editors are looking for, how to maximize the chance of publication success, and strategies for writing clearly.



Pre-Conference Workshops 2

Tips in Achieving Quality in Qualitative Research

Usman Mehboob¹, Ulfat Bashir², Umatul Khoiriyah³

¹Khyber Medical University Pakistan, ²Riphah International University Pakistan, ³Universitas

Islam Indonesia

Abstract

Qualitative research is still an emerging and evolving specialty due to which it is even more important to consider the design issues in its methodologies and evaluate it for its quality. Moreover, due to its contextual nature, the quality criteria that are used for quantitative research may not be applicable thus leading to a misinterpretation of study findings and limitations. Furthermore, the focus of quantitative research is on standardization in terms of validity and reliability which does not align with the contextual nature of the qualitative research.

In this workshop, the participants will discuss the quality criteria for qualitative research, and tips for achieving them. This discussion will enable them to align the quality criteria with the type of methodology that they plan to undertake for a prospective qualitative research project.



Pre-Conference Workshops 3

How to Write in Academia?

Ahsan Sethi¹, Shahid Shamim¹

¹Khyber Medical University, ²Dow University of Health Sciences

Abstract

Undergraduate students' Postgraduate students Researchers

Discuss critical writing skill Explain text organization Reflect on quality of evidence Discuss grammar and formatting

How often we receive a resubmission or rejection just because it is not clear to the reviewer. Assignments, dissertations and papers gets rejected not only because of its content but also due to lack of clarity and critical analysis. This workshop will help you improve your academic writing skills



Pre-Conference Workshops 4

Use of Artificial Intelligence in Health Professions Education: Technology Development to Application

Hossam Hamdy¹, Samer Ellahham²

¹Gulf Medical University UAE, ²Cleveland Clinic - Abu Dhabi UAE

Abstract

The pandemic COVID-19 has disrupted and accelerated the use of AI in medical education. Explore and share with the participants - experiences, application and implications of the technology to the future direction of students learning and assessments. Review innovation in medical education using artificial intelligence based high fidelity simulators and its implication to the future direction of learning and assessment.

Workshop Description

Presenter will give introduction to the workshop and how it will run.

Participants share their experiences in introducing innovation during the COVID-19 pandemic and in the post COVID period.

The Virtual Patient Learning (VPL) high fidelity simulation, a model of AI for learning and assessment of clinical competencies will be presented.

Participants will provide ideas to improve the use of AI based education in their own context.



Pre-Conference Workshops 5

Developing Student Portfolio for Learning and Assessment

Fareesa Waqar¹, Ambreen Ansar², Lubna Rani Faysal¹
¹Riphah International University, ²Wah Medical College

Abstract

Objectives: Discuss what is portfolio, its types & uses in Medical education Name some portfolio building websites & tools

Deliberate about which type of portfolio suits best to their students, review & scrutiniese the content of portfolio for their student's (1-3 Lo & their piece of evidence) write a piece of reflective writing and start developing your own portfolio.



Pre-Conference Workshops 6

Online Small Group Clinical Bedside Teaching (BST) Using Authentic Scenario with Hypothetico-deductive Approach and Instructional Model Principles

Shahid Hassan, Hasnain Zafar Baloch International Medical University Malaysia

Abstract

The rationale of designing and developing Online Be (side) Teaching (BST) in pandemic was to move on with students' clinical skills learning process and to share authors experience in conducting this method. Adaptations were followed while creating Be (side) Teaching to complement authentic BST conducted in a real F2F learning environment.

The intended participants:

Health Profession Educators, Clinical physicians, Nurses, Instructional designers, Module and Semester Coordinators, Programme directors, Associate Deans and Deans, Online facilitators Workshop Objectives:

Applying innovative concept of online bedside teaching. Identifying a best fit to situation learning theory as, Barrow's and Kassirer's hypothetico-deductive and think aloud approach and Gagne's Instructional Model. Incorporating technology with learning theory. Incorporating reflective practice (Gibb's Model) and feedback to monitor learning aligned with outcome.

Workshop Schedule:

Method adapted is Barrows' hypothetico-deductive approach with thinking-aloud procedure. Method starts by introducing the patient's clinical problem. Supervisor taking the dual role of a instructor and patient. Next questions are invited to interview the patient to explore information from the history. Supervisor reveal the information upon request. Hypothesis on differential diagnoses is generated. The similar process is repeated for physical examination and investigations and end of each clinical attribute the hypothesis generated by the group is reviewed in line with further information sought to retain or delete some of those differential diagnoses in a typical hypothetico-deductive approach with speak a loud process of entire members in the group. From the student's narrative feedback, we conclude that this is a very stimulating method in triggering students' analytic reasoning in a similar way they experience in authentic BST. This process will provide students an opportunity to practice the clinical reasoning process.



Pre-Conference Workshops 7

Facilitate Your Students Using OMP's; Time Efficient Teaching

Saadia Sultana, Nadeem Akbar Riphah International University

Abstract

It is designed for both clinical preceptors & students/trainees to enhance shared responsibility for learning. OMP is a teaching method, designed to help faculty to teach efficiently when otherwise pressed for time

Carry out satisfactory OMPs with students/residents/learners in clinical teaching. • Critique the process of OMP the model addresses both a learner's database and cognitive processes, guides appropriate teaching, and makes use of immediate, specific feedback. Workshop format:

The workshop consists of three parts: a brief introduction, role play by two groups, and a wrap-up discussion. The entire workshop takes one hour.



Pre-Conference Workshops 8

Fostering Professionalism in Health Professionals Through Curriculum

Khalid Farooq Danish¹, Tausief Fatima²

¹Riphah International University, ²Ameer-Ud-Din Medical college

Abstract

It is essential that health professionals be given explicit and planned learning experiences to deal with threats in their professional career. Workshop aims to prepare health professional educators to effectively train students to identify and practice good moral behaviour and avoid or solve professional dilemmas during their prospective professional life.

3-hour workshop Introduction Individual and group work on deciding attributes of professionalism to be taught Presentation on Teaching and learning strategies for professionalism. Group work on teaching strategies Presentation on assessment strategies for professionalism Group work on assessment strategies Group presentations and discussion summary, take home message Q/A session Feedback

Workshop Objectives:

- 1. Priorities desirable professional attributes of health professionals
- 2. Identify teaching learning strategies for professionalism
- 3. Design professionalism teaching and training program for health professionalism
- 4. Identify assessment and evaluation strategies for professionalism



Pre-Conference Workshops 9

Internet Based Learning in COVID Era: Trends and Challenges

Vernon Curran¹, Rahila Yasmeen²

¹Memorial University of Newfoundland Canada, ²Riphah International University Pakistan

Abstract

Many medical schools have been markedly challenged by COVID-19 with mandates to reduce physical contact and make learning available online. This has resulted in a massive adaptation in medical education during this pandemic, with major shifts from in-person teaching to online learning. This adaptation has introduced many opportunities, but at the same time has been challenging for learners and faculty to effectively adapt from in-person teaching to interactive and engaging online learning. Many learners and medical educators are now learning and teaching exclusively online for the first time. The purpose of this workshop is to examine approaches in design of interactive online learning, types of online learning and methods, strategies for enhancing the quality of online teaching and learning and benefits and challenges of online learning for medical education.

Objectives:

- 1. Discuss key learning principles to guide instructional design approaches for online learning
- 2. Describe different modes of online learning and associated learning systems and platforms
- 3. Identify key, best-practice instructional methods and techniques for facilitating engaging and interactive online learning
- 4. Discuss opportunities for enhancing medical education through adoption of effective, online learning approaches



Pre-Conference Workshops 10

Assessment of Professional Behavior and Ethics

Suhaila Sanip¹, Mia Kusmiati²

¹University Sains Islam Malaysia, ²Medical Faculty of Universitas Islam Bandung Indonesia

Abstract

Ethical and professional behavior is an important outcome of a health profession education. There are many facets of ethics and professionalism (Hodges,2019). Therefore, it should be taught and nurtured from day one of health profession education. It is always challenging to assess ethical and professional behavior. van Mook et. al (2009) proposed the triangulation of several assessment tools—instead of reliance on one tool to best assess professional behavior. Assessment of professionalism can also be done in the context of individual and interpersonal level (Hodges, Paul et al. 2019). Dealing with self, dealing with task, dealing with others, and dealing with God have become the perspectives in which ethical and professional behavior can be assessed on (Al Eraky, Donkers et al. 2014). Moreover, involving stakeholders in assessing ethical and professional behavior is also worth considering (Kusmiati, Sanip et al. 2019).

The workshop is aimed at introducing the toolbox for assessing ethical and professional behavior of students in the health profession education.

Intended outcomes: At the end of the workshop, the participants should be able to:

- Identify various techniques that can used by health profession teachers to nurture ethical and professional behavior in their students.
- List and identify the suitable tools to assess ethical and professional behavior of their students

Structure: The workshop will start with an introduction to the topic by the facilitators via presentation. It will be followed by clarifying participants' understanding of the topic and expectations from the workshop. The majority of the time will be spent of group activity where participants will work on a few case studies to further enhance their understanding of the topic.

Who should attend: This workshop is designed to be helpful to teachers from various health profession education who are interested in the development of ethical and professional behavior of their students and how to assess them.



Pre-Conference Workshops 11

Post Graduate Healthcare Quality and Patient Safety Program development and Launching: Challenges and Opportunities

Matiur Rahman Riphah International University

Abstract

Recognize the magnitude and the importance of Post Graduate Healthcare Quality patient safety training. Become aware of the principles and methodologies in healthcare Quality & patient safety and how this relates to delivering safe and quality services to patients. Share experiences of PG Healthcare Quality and Patient safety program Riphah

The intended participants:

Medical, Dental, Pharmacy, Nursing, Rehabilitation Sciences College Principals, Faculty and Students. Doctors, Nurses, Pharmacist and Rehabilitation sciences practitioners. Medical Educationists

Workshop Objectives:

Safety assessment using mixed methods including observations/role playing/simulation will be explored. Describe how a focus on the importance of teamwork and leadership can enhance patient safety.

Workshop Schedule:

Patient safety issues are quite common in hospitals globally and it is the 3rd leading cause of death in the USA. The situation of Patient safety is quite alarming and a large number of unnecessary morbidity and mortality in hospitals during their medical care. There is no authentic data to accept or refute this because of non-availability of published literature about quality and safety in developing countries but certainly the situation is quite alarming. There is wide consensus that Post Graduate programs for Healthcare quality and patient safety must be developed in medical education to develop Healthcare Quality and Patient Safety specialists to lead Healthcare Quality and Patient Safety in hospitals. While graduate medical education includes QI/PS in the ACGME competency domains, the AAMC and World Health Organization call for more formal training of these concepts in both undergraduate and Post graduate medical education.



Pre-Conference Workshops 12

Effective Communication and Team Collaboration in Multicultural Health Care Environment; Challenges and Solutions

Manasik Hassan, Magda Yousef, Hatim Abdelrhman Hamad Medical corporation Qatar

Abstract

Objectives: Highlights the importance of effective communication & collaboration among (HCPs) in a multicultural healthcare environment 2) Identify challenges and barriers to promoting communication in multicultural clinical work area 3) Use different practical communication tools and strategies to promote such collaboration.

Rationales': Promote communication and collaboration among Health Care Providers (HCPs) in a busy clinical environment is paramount. Effective communication associated with better patient care, less medical errors, increase teamwork & job satisfaction. Such collaboration is challenging and often requiring unplanned communication among busy healthcare providers.

In this interactive workshop participants will be engaged in several activities: (1) interactive didactic introduction on the significance of communication and team collaborations among (HCPs) in a multicultural healthcare environment, share decision and putting plan together, known challenges faced or perceived. (2) Engagement in discussions and reflections on videoclips of different communication gaps in clinical workplace. (3) in small groups, participants will identify barriers to implement effective communication in culturally diverse healthcare environment (4) Practice different tool and strategies to support communication and team collaboration.



Pre-Conference Workshops 13

Quantitative Research in Medical Education-Choosing the Right Design and the Test

Madiha Sajjad, Rehan Ahmed Khan Riphah International University Pakistan

Abstract

Medical education research is crucial in guiding changes in medical education. However, many clinical medical educators lack the training and skills needed to conduct high-quality research. This workshop aims to give practical guidelines in selection of an appropriate quantitative research design and methods in alignment with the stated research question. Workshop Objectives:

- 1. Describe the commonly used methods in quantitative research
- 2. Select an appropriate research design.
- 3. Select the right methods for a research design



Pre-Conference Workshops 14

Applying Blended Learning Approach to Engage Students On-Campus and Off-Campus Using Instructional Design for Designing Online Learning Experiences.

Hasnain Zafar Baloch, Hasnain Zafar Baloch International Medical University Malaysia

Abstract

Online learning is becoming an integral part of healthcare education. This workshop will introduce participants to the basics of instructional design, seamless integration of on campus and off campus activities, learning experiences with hands on component to explore different tools to plan, design and develop Online Learning activities and online module. Workshop Objectives:

- 1. Identify the importance of instructional design in developing online learning activities/module.
- 2. Write instructional outcomes suitable for online courses.
- 3. Identify appropriate instructional strategies for effective course delivery.
- 4. Tools appropriateness
- 5. Plan an online course model including the assessment and the feedback

Workshop Schedule: Participants will be provided with links to two developed online courses. Participants will be asked to assess the content as a learner and discuss in groups. What, Why and How when it comes to instructional design. Presentation (addressing the items raised during the discussion in item 1 + discussing instructional design models. Introduction to online tools that can be used to develop online courses Hands on session exploring online tools to design and develop online learning experiences and how can they be used. Develop your own online course Hands on activity the participants are required to select their own tool and provide an outline of an online course (divided into two groups) Presentation of Online Learning Activities and modules. Participants will present in groups/ individual the masterpiece of their work. Participants will show online learning activities they designed and how this will match the learning outcome/objectives.



Pre-Conference Workshops 15

Online Students Assessment

Saiful Bahri School of Medical Sciences, Universiti Sains Malaysia

Abstract

The term assessment is used to refer to judgements on individual student progress and achievement of learning goals. It covers classroom-based assessments as well as large-scale, external assessments and examinations either physical or digital setting. A complete assessment framework will generate synergies between its components to get a greater learning impact by combining two or more components together than we would get by adding the effects of each. This pre-conference workshop will revisit the basics of assessment, discuss the current practices of online assessment, and design online assessment strategies for better assessment experience.



Pre-Conference Workshops 16

Leadership Cultural and Gender Differences in Medical and Healthcare Organizations

Fadil Çitaku Academy of Leadership Sciences Switzerland (ALSS) Switzerland

Abstract

This workshop focuses on the theory and practice of cultural and gender differences in leadership styles and outcomes. It provides women as well as men with an opportunity to reflect upon and to challenge traditional notions of leadership within their healthcare organizations.

Develop a greater understanding of cross-cultural and leadership Describe dimensions of culture in medical and healthcare organizations. Become prepared as a leader to be more aware of gender that impacts leadership effectiveness in organizations. Learn what gender differences in communication are. Increase your awareness in terms of Women and leadership.

Workshop Schedule:

Welcome, Introduction of instructors Workshops aims Introduction to Leadership Cultural and gender differences in leadership styles and outcomes Group activities Leadership and cultural differences Plenary discussion Take home messages



Pre-Conference Workshops 17

Student Engagement in Online Classes

Masood Jawaid Director Medical Affairs at PharmEvo (Pvt) Ltd Pakistan

Abstract

Objective:

At the end of online workshop, participants will be able to:

- Describe difference in face to face and online lecture
- Receive immediate feedback from the students during the online lectures
- Describe difference in slide design to enhance online learning
- Engage students with multiple strategies while presenting online
- Generate evidence for students understating about the concepts taught



Pre-Conference Workshops 18

Structuring a Mentoring Program for Undergraduate Medical Students and Character Building in Future Doctors

Shabana Ali, Humaria Fayyaz, Tahira Sadiq Riphah International University

Abstract

Mentoring program outlines a place in defined curriculum for well-planned mentor and mentee relationship. Mentor characteristics and qualities also play a role. A structured relationship will guide mentor and mentee in following path of their relation. This will improve quality of learning and hence may help in their professional life.

Workshop Objectives:

- 1. To establish benefits of structuring a mentoring program in medical schools.
- 2. Design a basic outline of mentoring module for future doctors.
- 3. Outline the contextual role of a teacher as a mentor in character building of future medical doctors.



Pre-Conference Workshops 19

MCQ Item Analysis: Quantitative and Qualitative

Mennatallah Hassan Rizk ismail, Ahmed Mady Shehata Alexandria Faculty of Medicine Egypt

Abstract

MCQs exams analysis is important part of assessment cycle we should pay more attention for both quantitative and qualitative analysis to ensure high validity and reliability. We need to make decisions regarding the exam results like Mark moderation or removing questions from Question Bank

Workshop Objectives:

- 1. To provide participants with basic principles of MCQs item analysis and how to make maximum benefits from the data we got.
- 2. To make decisions regarding the exam like moderation of marks based on item analysis.



COURSES



Course 1

Electronic Tools in Medical Education E-TIME

Rehan Ahmed Khan¹, Saad Naeem Zafar¹, Masood Jawaid²

¹Riphah International University Pakistan, ²Medical Affairs at PharmEvo (Pvt) Ltd Pakistan

Abstract

Teachers in the era of modern technology need to be equipped with tools that can facilitate their teaching. This course would introduce a teacher to the computer and online tools through which teacher can develop an online course and do its assessment. The end of this 3 - hour course, the participants will be able to: Explain the need for instructional design in developing a course Describe Moodle and its uses Demonstrate the use of tools used for online learning and assessment



Course 2

Educational Leadership Development for Health Professionals Developing Countries

Yawar Hayat Khan¹, Gohar Wajid², Fadil Citaku³

¹Riphah International University Pakistan

²World Health Organization Egypt

³Academy of Leadership Sciences Switzerland (ALSS) Switzerland

Abstract

According to experts of leadership science (Çitaku et al., 2012; Çitaku, Mano, Hayat Khan et. al. 2018; Çitaku, Ramdani, 2020) —an important threat facing the world today is the lack of effective leadership of our human institutions. Health organisations and medical schools—like other human institutions—need competent and effective leaders now more than ever to face the threats and challenges of the modern world.

Nowadays educational leaders are under scrutiny to achieve heightened expectations for improvement to teaching and learning. They are called to be educational visionaries, instructional and curriculum leaders, assessment experts, community builders, public relations experts, budget analysts, facility managers, special programmes administrators and expert overseers of legal, contractual and policy mandates and initiatives (Çitaku et al., 2012; Çitaku, Mano, Hayat Khan et. al. 2018; Çitaku, Ramdani, 2020). Yet, they encounter major challenges such as commercialisation of the university's and medical school's central purpose, perceived lack of accountability of higher education and heightened sensitivity of taxpayers towards ineffective and inefficient leadership in academia. Medical school leaders, in addition, are confronted with many concerns such as financial stability, curriculum development, research support and accreditation standards. The ability to meet these demands may be compromised as a result of inadequate and inefficient leadership. This course will outline the evidence-based Leadership and Emotional Intelligence Competencies, which are required to reach the Excellence in Educational Leadership. In addition, a participant will:

- •increase their knowledge and understanding of successful leadership
- develop their leadership skills
- •self-evaluate their approaches to leadership
- reflect on their leadership practices
- •enhance their performance as leaders.



Course 3

Accreditation Clinic for School of Nursing

LAM-PTKes

Abstract

In 2021, LAMPTKES applies 9 criteria in the accreditation process of health institution in Indonesia. These criteria are quite different with the previous accreditation standard. This course is aimed to give detail explanation about the new accreditation criteria and simulation in which these criteria should be fulfilled.

After this course the participants will be:

- Understand the scope of each accreditation criteria of school of nursing
- Understand to create self-evaluation of a school of nursing
- Understand how to prepare the document needed in each accreditation criteria of school of nursing



Course 4

Accreditation Clinic for Medical Faculty

LAM-PTKes

Abstract

In 2021, LAMPTKES applies 9 criteria in the accreditation process of health institution in Indonesia. These criteria are quite different with the previous accreditation standard. This course is aimed to give detail explanation about the new accreditation criteria and simulation in which these criteria should be fulfilled.

After this course the participants will be:

- Understand the scope of each accreditation criteria of medical faculty
- Understand to create self-evaluation of a medical faculty
- Understand how to prepare the document needed in each accreditation criteria of medical faculty



Course 5

Integration of Islamic Ethical Values in Medical Curriculum

Najeeb ul Haq¹, Iqbal Khan², Zwasta Pribadi³

¹Peshawar Medical College Pakistan, ²Shifa Tameer e Millat University Pakistan, ³Universitas YARSI Indonesia

Abstract

Every person has the right to seek treatment in accordance with his / her faith. Muslim doctors need to know basic issues of Muslim faith related to health care and medical education. It is the religious obligations every Muslim to acquire enough knowledge of Islam to practice his profession accordingly. It is also important for Muslim teachers to train the students in the medical schools and enable them to address the issues of patients and colleagues in line with Islamic teachings.

The major requirement for incorporation of Islamic values in medical curriculum is trained teachers with appropriate professional and relevant Islamic knowledge. The teachers are required to understand the basic concepts of related issues and its incorporation in medical ethics / curriculum.

These may be taught in the form of lectures (large class format), Small group discussion, MCQs, OSCE and case based studies. Examples are provided for some of these TLM. These issues may be categorized in the following groups;

- 1. Common problems of medical ethics with their Islamic concept
- Examples: Autonomy, Consent and Confidentiality, Doctors Pharmaceutical relations, Medical Errors and Liability Professionalism, Organ Transplantation and Termination of pregnancy etc
- 2. Subjects related to Islamic faith of Muslim patients Examples: Patients issue during obligatory fasting, prayers, specific issues related to reproductive health, gender interaction, permissible (Halal) and Forbidden (Haram) contents of medications and procedures etc.
- 3. Role of Islamic teachings in certain specific issues / problem Examples: Prostitution or homosexuality and transmission of certain disease, rights of pregnant ladies, alcoholism, role of Islamic Teachings in prevention of Hepatitis A, B, C, HIV, Obesity and end of life care etc



Course 6

Accreditation Clinic for School of Midwifery

LAM-PTKes

Abstract

In 2021, LAMPTKES applies 9 criteria in the accreditation process of health institution in Indonesia. These criteria are quite different with the previous accreditation standard. This course is aimed to give detail explanation about the new accreditation criteria and simulation in which these criteria should be fulfilled.

After this course the participants will be:

- Understand the scope of each accreditation criteria of school of midwifery
- Understand to create self-evaluation of a school of midwifery
- Understand how to prepare the document needed in each accreditation criteria of school of midwifery



Course 7

Accreditation Clinic for Other Health Profession Institutions

LAM-PTKes

Abstract

In 2021, LAMPTKES applies 9 criteria in the accreditation process of health institution in Indonesia. These criteria are quite different with the previous accreditation standard. This course is aimed to give detail explanation about the new accreditation criteria and simulation in which these criteria should be fulfilled.

After this course the participants will be:

- Understand the scope of each accreditation criteria of other health profession institutions
- Understand to create self-evaluation of other health profession institutions
- Understand how to prepare the document needed in each accreditation criteria of other health profession institutions



CONFERENCE WORKSHOPS



Conference Workshop

Leadership Cultural and Gender Differences in Medical and Healthcare Organizations

Facilitator Prof. Dr. Fadil Çitaku Co-facilitator 1 Prof. Dr. Fadil Çitaku Co-facilitator 2 Prof. Dr. Yawar Hayat Khan Level of workshop Intermediate

Workshop Attend Everybody involved in Healthcare, Medical Doctors, Dentists, Nurses, Hospital Directors, HR etc.

Workshop Objectives Upon completion of this workshop, you should be able to:

- Develop a greater understanding of cross-cultural and leadership in medical and healthcare organizations.
- Describe dimensions of culture in medical and healthcare organizations.
- Become prepared as a potential leader to be more aware of gender that impacts leadership effectiveness in medical and healthcare organizations.
- Learn what gender differences in communication are.
- Increase your awareness in terms of Women and leadership labyrinth in medical and healthcare organizations.



Conference Workshop

Develop Script Concordance Tests

Facilitator Muhammad Idrees Anwar Co-facilitator 1 Dr Aisha Rafi Level of workshop Intermediate

Workshop Attend Medical educators, curriculum planners, teachers, Assessors. Workshop Objectives Discuss Script concordance tests Create script concordance tests



Conference Workshop

Digital Health Class Workshop

Facilitator Niko Azhari Hidayat dr. SpBTKV(K)
Co-facilitator 1 Mahendra dr. SpA
Co-facilitator 2 Riswanda Noorisa dr.
Co-facilitator 3 Alvin Saputra dr.
Level of workshop Introductory

Workshop Attend Medical or Health Students who have passions for Update technology in healthcare & services. Having enthusiasms on Digital platforms in medical or health services. Workshop Objectives After following & joining the Digital Health Class workshop, students might understand the basic concept & mindsets on the Digital Health platforms, and be interest in developing their knowledge and science to another form of understanding.



Conference Workshop

Digital Professionalism in Medical Education

Facilitator Noor-i-Kiran Haris Level of workshop Intermediate

Workshop Attend Medical Teachers from Allied Health Professions
Medical Educationists Medical students (Under- and postgraduate students) Allied Health
Professions Students
(Under and Postgraduate)

Workshop Objectives By the end of the workshop, participants shall be able to:

- 1. Define digital professionalism
- 2. Delineate importance of demonstrating professionalism at various social media sites.
- 3. Identify various lapses in digital professionalism in context of medical education.
- 4. Demonstrate strategies to dicsove such lapses during online social interaction.



Conference Workshop

Constructive Feedback- Why, How and How Not to Do It!

Facilitator Muhammad Nadimn Akbar Khan Facilitator email nnadeem.akbar@riphah.edu.pk Co-facilitator 1 Prof. Dr Saadia Sultana Level of workshop Intermediate

Workshop Attend Deans, Principals, Medical College Faculty, Medical Educationists, HPE students, Medical students, Post graduates and all other Health Professionals.

Workshop Objectives:

- To describe the purpose & benefits of feedback
- To discuss the essential characteristics of effective feedback
- To learn the how to give constructive feedback to students/residents/learners in clinical teaching.
- Critique the process of Constructive Feedback

Workshop Rationale Feedback is specific information about the comparison between a trainee's observed performance & a standard, given with the intent to improve the trainee's performance. Feedback helps learners to evaluate their knowledge & skills, identify strengths & weaknesses, Understand preceptors' expectations & weather meeting those expectations, Make continual improvement to performance

Workshop Schedule The workshop consists of three parts: PPT on constructive Feedback, role play by two groups, followed by critique by these groups, and a wrap-up discussion. The entire workshop will take 2-4 hours. Workshop format: Program of workshop:

- 1. PPT: on constructive Feedback
- 2. Activity- Divide the participants into four groups i.e. Groups I, II, III & IV. Group I & III will prepare Role play of constructive feedback. Group II & IV will give critique/comments on the role play of first group.
- 3. Wrap-up/ Final recommendations. Collect Feedback Performa Resources Required Stand banner File covers Handouts Feed-back proformas Critique proformas stationary name tags Board markers -2 Charts Flip chart papers



Conference Workshop

MCQs for Online Assessments

Facilitator Dr Ayesha Younas
Facilitator email ayeshajawwad@gmail.com
Co-facilitator 1 Dr Ambreen Ansar
Level of workshop Intermediate

Workshop Attend Faculty members of undergraduate and postgraduate programs involved with assessing students in an online environment Workshop Objectives by the end of this workshop participants should be able to 1. Develop MCQs specifically for assessing students in online examinations 2. Identify and correct common flaws in MCQ development



ORAL PRESENTATION



Oral Presentation 1: Assessment-1 OP1B001

Communication Assessment Tool (CAT) In "Bahasa" Indonesian Version

Sulistiawati Sudarso, Nur Khoma Fatmawati Faculty of Medicine Mulawarman University, Indonesia

Physician communication can be assessed using the Communication Assessment Tool (CAT) questionnaire. This questionnaire can also be used to assess the communication of residents or medical students. This study aims to develop a "Bahasa" Indonesian language version of CAT, and to examine the validity and reability of the questionnaire.

This research was conducted at an ophthalmology clinic in Samarinda. The CAT questionnaire was developed by Makoel et al., (2007) with 15 questions. We will evaluate only 14 questions because 15th question is not used to assess doctor communication. The study was conducted in several stages. First, the CAT questionnaire was translated into Indonesian. Then the questionnaire was tested for readability by 5 people to assess the readability and understanding of the questionnaire. After that, the questionnaire was distributed to patients. Evaluation of the construct validity of CAT was assessed by calculating the score of internal consistency and item' validity.

A total of 96 patients filled out the questionnaire. The result shows that 14 items of CAT have a Cronbach alpha value of 0.96 and validity value per item > 0.3.

CAT in Bahasa Indonesian version proved to be valid and reliable



Assessment-1 OP1B002

Developing Content & Format of E-Portfolio in Higher Education

Ambreen Ansar Wah Medical College

The objectives of the literature review will be to systematically search for the basics of Portfolio, its types, and uses, and the methods used to develop and validate the contents of the portfolio for MHPE. PRISMA guidelines i.e. preferred Reporting Items for Systematic Reviews & Meta-analysis will be used to.

Search sources 1. Journal databases: PubMed, ERIC, Science Direct, Google Scholar 2. eBooks and encyclopedias 3. Grey literature: Google scholar, thesis and dissertations, conference proceedings, published reports Information will be searched on these databases and reviewing reference lists of included studies to identify further studies. Exclusion criteria 1. publications on a portfolio for the job, dossier, 2. portfolio for school children. The relevant studies will be exported to Mendeley and excel sheet as a Journal citation report (JCR). Keywords will be: Portfolio E-portfolio Types & uses of e-portfolio Learning e/-portfolio Digital eportfolio, Building/Developing e-portfolio, Electronic portfolio design, e-portfolio model/design



Assessment-1 OP1B003

Assessments in Medical Education: Challenges & Solutions During Covid Pandemic

Syeda Sadia Fatima, Romana Idrees, Kausar Jabeen, Saniya Sabzwari, and Sadaf Khan Aga Khan University

The Covid19 pandemic has caused large-scale disruption in almost all educational programs across the world. Planning and rapid implementation of assessment through an online format presents the next set of novel challenges that must be addressed by academic administrations across the globe.

We describe the planning, processes, and outcomes of online assessments using video communication platforms conducted at a private university in Pakistan. Standardized protocols were written and piloted, extensive training of student, proctors and staff for preparation and conduct of online assessments were developed. Feedback was recorded after each session and suggestions were incorporated in subsequent high-stakes assessments.

A total of three pilot assessments were conducted to identify issues and process refinement. Commercially available lockdown browser and ZOOM were used in the first pilot; 80% of the class was unable to launch lockdown browser and laptops required repeated reload/reboot. For the second pilot assessment, University's VLE page & MS Teams was trailed. Issues with internet connectivity, VLE page slowdown, and suboptimal recording feature in MS Teams were identified. For the final pilot assessment, phased launching of VLE page with single test item per page was implemented with success. Visual proctoring was successfully conducted through Zoom, with reliable recording.

In order to device an effective protocol for e-assessments conducting multiple trial runs, and incorporating feedback from all stakeholders is a necessity. Active visual monitoring during the examination, and review



Assessment-1 OP1B004

Programmatic Versus Traditional Approach to Assessment: A Semi-Structured Interview Study On Medical Students' Experience

Siti Khadijah Adam, Cees van der Vleuten, Ahmad Fuad Abdul Rahim, Nik Mohd Rizal Mohd Fakri, Muhamad Saiful Bahri Yusoff

Faculty of Medicine and Health Sciences, Universiti Putra Malaysia

Programmatic assessment differs from the traditional approach to assessment in terms of its subjective observation and emphasis on low-stake formative assessments, feedback, reflection and the use of feedback to guide future learning. This study aims to explore student's perceived experience pertaining to their assessment during medical training.

Semi-structured interviews were conducted with 66 medical students recruited purposively from Universiti Putra Malaysia (UPM) (n=27), Universiti Sains Malaysia (n=23) and Maastricht University (UM) (n=16). The interviews were conducted between November 2019 and May 2020. Transcripts were analysed thematically using ATLAS.ti software.

Three major themes were identified: appropriateness of assessment (relevance, fairness); students' learning (motivation, learning effort, learning approach, students' coping); and feedback (quantity, quality). Students from both assessment approaches highlighted the quantity of feedback that they received and the volume of demanding tasks they need to fulfil. They also were found to be concerned with the fairness of their assessment system. Students who experienced programmatic assessment showed their appreciation for its relevance and personalised learning leading to a meaningful learning experience.

The volume of assessment tasks and feedback is crucial in influencing student's learning. Consistent evaluation of assessment approach is needed to maintain an ideal assessment environment to optimise student's learning



Assessment-1 OP1B005

Kahoot! Aplication in Medical Education: The Alteration of Student Learning Performance

Galuh Suryandari Universitas muhammadiyah Yogyakarta, Indonesia

In term of Student's performance, student who learn using the game-based learning are significantly better than student who learn using conventional method. One of the game-based learning application is Kahoot! This article probed student learning performance alteration in different learning period of large-scale classes after using Kahoot! quiz application.

This research used Non-control quasi-experimental pre-post test method with total sampling from students learning period 2015, 2016, 2017, and 2018. Kahoot! Quiz score as pre-test data and final examination score which was taking from a certain appropriate question of the lecture partner's lecturer as post-test data. The data analysis method use a paired t-test followed by a Kruskal-Wallis test.

There were 563 students showing the alteration of student learning performances after implementation Kahoot! quiz application (p = 0.000). The highest average pre-post test score was 63,59 from 2018 student's learning period and the lowest pre-post test score was 47,64from 2016 student's learning period. There was relationship between student learning performance and learning period (p = 0.000) in School of Medicine FMHS UMY

Kahoot! quiz application significantly alterate student learning performance in a early learning period. The institution may applicate this application as early as posible



Assessment-1 OP1B006

Correlation between Clerkship Program Grading and the Result of National Exam on Medical Student

Yuhanida Ratnasari Universitas Muhammadiyah Surakarta

The result of medical education expressed with Grade Point Average (GPA). Assessment of medical competency conducted by National Exam on Medical Student. There were still many students who fail at National Exam indicates mismatch between them. This study aims to determine whether Clerkship GPA correlated with results of National Exam.

This is an analytical observational with a cross-sectional study design. The required data obtained from secondary data by using students' databases during education and results of National Exam in Faculty of Medicine of Universitas Muhammadiyah Surakarta in the 2017-There 2019 period. 335 data used samples. The were as result of the National Examination on Medical Student was divided into two variables, the first one was Computer Based Test (CBT) and the second one was Objective Structured Clinical Examination (OSCE). The data then analyzed using Spearman correlation test.

The statistical analysis showed that Sig. value of variable Clerkship Program GPA - CBT was p=0.000 and correlation strength r=0.350 which means there was a significant correlation but in a weak positive correlation. The Sig. value of variable Clerkship Program GPA - OSCE was p=0.003 and correlation strength r=0.162 which means there was a significant correlation but in a very weak positive correlation.

The result of statistical analysis in this study proved that the Clerkship Program GPA still correlates with the result of CBT and OSCE in the National Exam test.



Assessment-1 OP1B007

Explorative Study About Factors Affected Objective Structures Clinical Examination (OSCE) Competence Test

Huda Marlina Wati, Lasiah Susanti, Vanny Nurdelima Habsi Abdurrab of University

Objective Structured Clinical Examination (OSCE) is a form of UKMMPD examination which is an effort to guarantee quality of graduate doctors. The OSCE passing rate for first taker participants in 2018 and 2019 has decreased compared to the previous year, namely 77%. This has decreased from 2017 which reached 87.72%.

Researchers collected qualitative data by Focus Group Discussion (FGD) involving Abdurrab University medical students who have been registered as UKMPPD OSCE participants. Students involved include firsttaker graduate, retaker graduates and participants who have not yet passed UKMPPD OSCE. This research also collected data from lecturer interviews and documents related to academic history.

The factors that can influence during the UKMPPD OSCE exam include medical knowledge capability, mental readiness and individual characteristics (for example mentally suddenly blocked at one station, and how to deal with emotional / mental problems at one station, how to recover and be able to maximize performance at the next station), stress and panic.

Individual factors that affect the performance of the OSCE UKMPPD include medical knowledge capability, mental readiness, individual characteristics, stress and panic.



Assessment-1 OP1B008

Learning Experience of First-Time "World Café" Course for Medical Staff with Teaching Qualification

Chia-Hung Chen 1, Li-Chen Chang 2, Yung-Chi Cheng 1, Wen-Chi Chao 3, Chao-Yu Hsu 1,

Meng-Tse Lee 4

Chia-Yi Christian Hospital

"World Café", an interactive and alternating team discussion, has been widely used in recent years. Through discussion, rich and various opinions can be generated. In this study, we present the learning experience of first-time "World Café" course for medical staff with teaching qualification.

The learning courses of "World Café" was organized and performed on November 13, 2020. All participants were teaching qualification and they were the first time to join the learning course of "World Café". Four topics were discussed during the course. A focus group interview was made after the course. Qualitative research was based on observation records and verbatim transcripts of the interview.

Among the 21 participants, 9 participants (8 women and 1 man) were agreed to be interviewed after course. The interviewees received a focus group interview, which lasted about 40 minutes. After qualitative analysis, the results can be summarized as follows: 1. "World Café" is a flexible and interesting multi-way communication. 2. It triggers brainstorming. 3. Amazingly creative ideas are produced. 4. It can provide a right way to solve the problems. However, too much comparison with previous teaching experience was noted in the interview.

"World Café" is a good tool for medical staff to solve problems by using imagination to stimulate creativity. However, previous teaching experience should not be overemphasized.



Assessment-1 OP1B009

Clerkship Medical Students' Perception about Objective Structured Clinical Examination at Faculty of Medicine, University of Gezira, Sudan

Yassein K. Elhussein & Ahmed Hassan General Directorate of Health Affairs- Albaha, Ministry of Health

Objective structured clinical examination (OSCE) is a worldwide gold standard for assessment. OSCE implementation faces several obstacles represented primarily in resource availability, time consumption, complexity, and initial change resistance. This study aims to explore the clerkship students' perception regarding recently implemented OSCE in Faculty of Medicine, University of Gezira, Sudan.

A cross-sectional study was conducted amongst final-year medical students who had completed the Internal Medicine Clerkship in December 2018 at Faculty of Medicine, University of Gezira, Sudan. A 24-item online questionnaire was used to gather data about the perception of students regarding objectivity, comprehensiveness, diversity, fairness, clarity, overall organization, and administration of recently implemented OSCE, using a 5-point Likert scale. Students answered post-exam questions related to positive and negative aspects of the OSCE and provided suggestions for improvement. The OSCE comprised of eight active stations and real patients in all stations.

The number of targeted students was eighty, and the response rate was 72.5% (58). The majority, 82.8% (48), agreed that the exam was well-structured and administered. 75.9% (44) thought that OSCE assessed their skills fairly, and 72.4% (42) admitted that it was less biased. 74.1% (43) found OSCE less stressful than traditional long/short cases, and 86.2% (50) agreed that OSCE assessed a wide variety of skills. 93.1% (54) assumed that the instructions were clear. The majority provided positive opinions regarding OSCE as a useful assessment tool, 84.5% (49).

This study reflected clerkship students' satisfaction regarding OSCE, which could strongly support OSCE implementation, minimize resistance, and raise stakeholders' satisfaction. Furthermore, it could motivate other surrounding Faculties to adopt OSCE.



Assessment-1 OP1B010

Critical Competency Assessment of Students of Diploma Iii Sanitation Study Program with Sop-Based Assessment Method

Nurlaila Marasabessy Politeknik Kesehatan Kemenkes Maluku

Valid and reliable instruments are not only limited to being a measure of competence alone and provide an impact on the results of assessments or measurements carried out, but more than that. A good assessment instrument is even able to help lecturers, instructors and students in the learning process.

Preparation of SOP for each practical course, preparation of student critical competency assessment instruments for each practical course, evaluation and discussion of SOP and instrument assessment with all lecturers and instructors who master practical courses, review and revision of SOP as well as assessment instruments, expert reviews, SOP trials and assessment instruments on student samples, test validity and reliability of instruments, evaluation and improvement as a follow-up to the development of SOP and instrument assessment Application and evaluation.

The results of the review from lecturers and instructors who master the courses show that by using these instruments, it can help students in the learning process of improving critical competencies. Lecturers and Instructors also have clear direction and guidance in providing assessment to students.



Assessment-1 OP1B011

Can Eportfolios Scaffold Competency-based Workplace Learning in Low-income Countries? Lessons Learnt from A Qualitative Pilot Study In

Mieke Embo, Hilde De Grave, Séverine Van Der Stighelen, Martin Valcke, Olive Tengera, Alice Muhayimana, Josephine Murekezi, Jean Pierre Ndayisenga, Donatilla Mukamana Artevelde University of Applied Sciences and University Ghent

Low-income countries face a critical shortage of competent midwives. Competency-based midwifery education (CBME) holds the best promise of developing competencies and improving patient outcomes. This study explored midwifery students', mentors' and supervisors' perceptions about the generalizability of an ePortfolio designed upon an evidence-based Continuous Workplace Learning Competency Framework.

Using a qualitative descriptive design, in depth-individual interviews were carried out with four midwifery students, two midwife mentors from selected hospitals and two midwife supervisors from a midwifery teaching institution in Rwanda. All interviews were audio-taped, transcribed verbatim and thematically analysed using NVIVO12 software.

All participants preferred ePortfolio above paper-based portfolio because of the continuous online accessibility of information. This accessibility stimulated collaboration between stakeholders, facilitated self-monitoring performances, enhanced IT competencies, reduced time and costs to handle portfolios and improved, in some cases, feedback. Nevertheless, the success of implementing a competency-based ePortfolio was strongly dependent on to the extent essential conditions were met: devices, internet, time and training. The ePortfolio was not used in its full potential because different categories of the Competency Framework were unknown.

ePortfolios are promising tools to scaffold workplace learning in low-income countries. They might facilitate the understanding and implementation of competency-based education in clinical practice.



Oral Presentation 2: Assessment-2 & E-Learning OP1C001

Association Between Self-Discipline Towards Grade Point Average Among Medical Students

Artha Budi Susila Duarsa, Irwan Syuhada, Ayu Anulus Al-Azhar Islamic University, Indonesia

Self-discipline is the ability to prevent something that could lead to harmful effects of unhealthy excesses. Self-discipline has implications, particularly among medical students, for improving academic performance. The purpose of this study was to examine the association between self-discipline towards grade point average (GPA) among medical students.

This was a cross-sectional study conducted at Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 241 medical students was enrolled in this study. The dependent variable was the GPA. The independent variable was self discipline. Self-discipline data were obtained from the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) test at the first medical school admission process. GPA data were obtained from the academic section. The data were analyzed using the Chi-square test.

The study showed that GPA among medical students was mostly average (45.64%), good (44.81%), and low (9.54%). MMPI-2 test reported that students were mostly had good self-discipline (85.06%). From the Chi-square test, it was found that the GPA was associated with self-discipline among medical students at Al-Azhar Islamic University, Mataram (p=0.010). The grade point average among medical students is associated with self-discipline. Further study is required using the data from the MMPI-2 test.



Assessment-2 & E-Learning OP1C002

Factors Influencing Users' Perceptions On Workplace-Based Formative Assessment: A Grounded Theory Study

Vasiliki Andreou, Sanne Peters, Jan Eggermont, Birgitte Schoenmakers KU Leuven

Workplace-based formative assessment (WBA) has met with mixed reactions from users in postgraduate medical education. Users' perceptions about WBA tend to be negative. Consequently, its learning value has yet to reach its full capacity. In this study, we explored which factors influence users' perceptions about formative WBA.

We conducted a constructivist grounded theory study with focus groups in the interuniversity General Practitioners' Training in Flanders. Focus groups were administered online and asynchronous due to COVID-19. The main questions of the focus groups were open-ended. In total, 3 homogeneous focus groups with GP trainees (n=6), GP trainers (n=7), and GP supervisors (n=9) took part in this study. Data analysis followed the stages of open, focused, and axial coding.

Three predominant categories of factors were identified in the data: 1) users' engagement and agency in the assessment progress, 2) users' conceptualization about their own role in the curriculum, and 3) users' entrustment and their relationship with each other. These categories are interrelated in a mutual way. Negative users' perceptions were more prevalent, when users faced barriers in one of these three categories.

By mapping the factors influencing users' perceptions, our findings might facilitate changing the negative perceptions about workplace-based formative assessment and improve its educational value in medical curricula.



Assessment-2 & E-Learning OP1C003

Towards Paradigm Change of Formative Assessment in The Undergraduate Curriculum: The Participatory Action Research (Par)

Sylvia Mustika Sari; Iis Inayati; Atia Sidiqa Faculty of Medicine Jenderal Achmad Yani University, Indonesia

The concept of "assessment for learning" has been widely defined as a form of assessment that facilitates the improvement of students' learning. However, there is still limited evidence of the real implementation of formative assessment. This study explored the formative paradigm change in students and lecturers in our context.

A participatory action research approach was used in two groups of the undergraduate medical teacher (N=18), and students (N=30). This research contains two cyclical processes of reflection for over 4 months. In between the cycle, we have workshops and continuing discussions about formative assessment. The FGD and in-depth interviews were done to explore the gap between the cycle.

The results showed the gaps and challenges in changing the paradigm. We identified three themes of paradigm changes: (1) Formative is the assessment of knowledge to the assessment of thinking skills and professionalism; (2) Feedback is a content-related, one direction explanation to individual and dialogic form; (3) Formative assessment result is a score-minded to the improvement of thinking skills or process-minded. We found the challenges in these paradigm changes, such as (1) the good practice in "how to" assess and feedback dialog in cultural context; (2) the students' self-reflection skills; (3) the student and teachers' collaboration.

We found there is no simple way to adopt the theoretical paradigm changes that contextrelated. We recommend this participatory approach to be a crucial part of the implementation.



Assessment-2 & E-Learning OP1C004

Experience of Undergraduate Health Sciences Students Regarding Online Formative Assessments During Covid Period.

Sadiq Jan, Noor ul Ain Riphah International University

The advantage of online assessment is immediate feedback. Such type of feedback has the potential to engage the students in reflection and to take ownership of their learning. The objective of the study was to identify the experiences of undergraduate health sciences students about online formative assessments during the COVID pandemic period.

It was a cross-sectional study, carried out at Riphah International university Pakistan from preclinical and clinical students of undergraduate health sciences students including MBBS, BDS, and Pharm-D (n=351). The online questionnaire was designed by a literature review and search. Later it was validated by four educationists and modified according to the requirement of the study. After that, it was digitalized with a google form. The questionnaire contained 22 closed-ended questions on five themes related to online formative assessment with a three-point Likert scale. Data were collected in two months from July to August 2020. A descriptive analysis of the data was done.

Regarding improvement in learning 24.5% agreed, 33% students disagreed. 34.2% of students were motivated for learning, 36.2 % disagreed. 61% of students felt stressful and 19.1 % weren't. The majority were well aware of technology (74.4%) .51.3 % had internet issues.53.3% stated time insufficiency. 45 % agreed that they got immediate feedback from teachers while 23.1 % disagredd.46.4% were satisfied with the feedback and it improved their misconceptions about learning, 16 % disagreed. 73.5% agreed to have teacher's feedback on the same day while only 5% disagreed. 45 % disagreed to have an online formative assessment as part of continuous assessment, 32.2 % agreed.

This study supports that online formative assessments have untapped potential for use to assist learning with timely feedback. Recommendations are in-depth designing of online formative assessments within biomedical courses.



Assessment-2 & E-Learning OP1C005

Evaluation of Students Perception About E-Learning Educational Atmosphere (Eeam) In Private Dental College of Pakistan

Zainab Akbar, Waqas Hameed, Rahila Yasmin Riphah international University

The COVID-19 pandemic has emphasized importance of E-learning. An amendment to E-Learning Educational Atmosphere (EEAM) needs to be inculcated and applied at undergraduate level for future improvements and continuation of the successful strategies. The objective of this study is to evaluate online educational atmosphere of our institute using EEAM.

A cross sectional study involving 201 students of Rehman College of Dentistry, attending online classes in COVID-19 pandemic, were included through universal sampling. A pre validated and reliable questionnaire comprising of seven domains was used as information gathering tool. Out of these domains six have been tested with reliability of 0.9% with face and content validity judged by six experts. A seventh domain of knowledge, psychomotor and affective domain with a Cronbach's alpha of 0.8 was added keeping in view the circumstances in our set up. After data collection, quantitative statistics were analyzed using SPSS version 26.

A total of 161 participants (response rate of 80%) completed the questionnaire. Average age of the students ranged from 21 to 23 years of age. Gender distribution included 73 (46%) females and 87 (54%) males. Responses of questions of All first five domains of awareness of rules, safety and convenience, teaching quality, learner support, ethics and professionalism were mostly agreeing and strongly agree. While responses of questions 41 and 42 of program effectiveness domain and question 45 and 46 of knowledge, affective and psychomotor domain were mainly towards disagreement side (51, 71, 79 and 77% respectively).

Student satisfaction regarding domains for awareness of rules, safety and convenience, teaching quality, learner support, ethics and professionalism was high while program effectiveness, psychomotor and affective domain needs improvement in



Assessment-2 & E-Learning OP1C006

ePortfolio Use: A State-Of-The-Art Review in 8 Undergraduate Healthcare Educational Programs

Janssens Oona Ghent University

EPortfolios have attained an established position in healthcare education and studies exploring the use of ePortfolios increased exponentially. However, a comprehensive, interdisciplinary overview of the literature is lacking. This review aims at developing a benchmark about ePortfolio use in undergraduate healthcare education to help optimizing future ePortfolio practices.

A state-of-the-art-review was conducted about the use of ePortfolios in audiology, dental hygiene, midwifery, nursing (bachelor and associate degree), occupational therapy, podiatry and speech therapy. A systematic search strategy of eight literature databases was adopted to track literature about ePortfolio use in educational as well as workplace learning settings. Undergraduate educational programs were included while non-English texts, book sections, news articles and literature within medical and postgraduate educational contexts were excluded. We identified 8 major themes to structure the data: terminology, samples, contexts, objectives, ePortfolio-platforms, advantages, challenges and recommendations. Thirty-seven of the 384 analysed articles were included. Samples mostly involved students, both in educational and workplace learning contexts. Studies often explored students' perceptions and satisfaction, outlined characteristics of successful ePortfolio use, overviewed challenges adopting ePortfolios and evaluated ePortfolio implementation. There were no studies investigating the effect on quality of patient care. Remarkably, advantages of ePortfolios pit forward in one study were sometimes entitled as challenges in other studies, possibly caused by using different ePortfolio-platforms aiming different objectives, for example feedback or accreditation. Finally, we overviewed reported recommendations e.g. integrate artificial intelligence; use ePortfolios to support lifelong learning besides assessment.

This first interdisciplinary review might help ePortfolios to optimize future ePortfolio practices, provided that future research considers reported recommendations, involves all ePortfolio-users and focuses on quality of patient care.



Assessment-2 & E-Learning OP1C007

Medical Lecturers' Readiness in Online Teaching during COVID-19 Pandemic

Daniel Ardian Soeselo Atma Jaya Catholic University of Indonesia

The COVID-19 pandemic has caused a sudden shift towards online learning in education system. The readiness of lecturers in conducting online learning is one of the essential preconditions for online learning in medical education system. This study aims to measure lecturers' attitudes towards online teaching competencies and their differentiating factors. This descriptive-analytic study was conducted in June-July 2020, which is three months after full-online learning was implemented in Atma Jaya Catholic University of Indonesia. The Faculty Readiness to Teach Online (FRTO) guestionnaires with four sub-scales (course design, course communication, time management, and technical competency) as the instruments were given to the medical lecturers to evaluate their readiness to teach online. The validity and reliability of lecturers' responses were examined. We used multivariate analysis of variance (MANOVA) to analyse the differences in lecturer's attitude towards online teaching competencies with reference to gender, age, education level, rank, and years of teaching. A total of 63 lecturers from our institute participated in this study, 35% were males and 65% were females, with the mean age group of the respondents was between 41.63 ± 7.95 years old. The FRTO questionnaires results show overall high rates (3.50 \pm 0.74) of the lecturers' attitudes to teach online. Course communication were rated the highest (3.79±0.66), followed by course design (3.46±0.76), technical competence (3.39±0.71), and time management (3.35±0.82). Results from multivariate analysis show significant differences in gender (p<0,00), age (p<0,00), and years of teaching (p<0,00) for lecturers' attitudes towards online teaching competencies.

The findings of this study show a good level of lecturers' readiness to teach online. General training for lecturers should be conducted to accommodate the differences in their readiness levels.



Assessment-2 & E-Learning OP1C008

First Semester Preclinical Faculty of Medicine UNISSULA Students Engagement during Online Learning Due to COVID19 Pandemic.

Putri R Ayuningtyas Universitas Islam Sultan Agung, Indonesia

The outbreak of COVID-19 pandemic causes havoc among many aspects of life including education. In Indonesia, 8 months since the first outbreak the mode of teaching have shifted from face to face to online learning. This study aims to investigate the students engagement and willingness during online classes.

questionnaire items were developed based on aspects of problem based learning which include small group discussion, skill laboratory, practicum, lecture and online examination. The responses were based on 5 points Likert scale to rank the engagement, willingness of online learning and also the students understanding on the indicators as well as open responses to record their opinions on online learning

the first semester students are quite engage and willing to attend online classes eventhough some of them feels that they need clearer instructions especially during practicum. Some also reported that network problems, environment during classes become distractions during online learning.

online learning for first semester preclinical students can engage students but need further improvement



Assessment-2 & E-Learning OP1C009

Online CPD Activities Leads to Learning and Change In Faculty: An Experience of RARE in COVID 19

Muhammad Latif Siddiqui, Sady Ahmad, Saqbi Gondal Riphah International University

The main purpose of this study was to assess the effectiveness of CPD faculty developments activities organized, implemented and evaluated by Riphah Academy of Research and Education of Riphah International University Pakistan in COVID 19 Era from March-December 2020

Documents analysis and post event quantitative evaluation data analysis of surveys was the main methodology. Descriptive analysis of data was done.

Analysis revealed that, in COVID era RARE has trained approximately 300 faculty members nationally and number of activities organized are 15 including workshops and online symposium on the following themes; online teaching learning, online assessment, designing of asynchronous course, digital leadership, challenges faced by student in online teaching, learning and assessment. Most of the faculty gained knowledge and skill and change in behavior through CPDs. These activities help in carrying out their online teaching effectively. Need analysis of Riphah faculties shown that they want to be trained in curriculum development, teaching & learning strategies, Assessment, academic administration and research methodology

Faculty development in Online teaching and learning has become an increasingly important component that needs to be planned out and execute by a dedicated team and department in an organization.



Assessment-2 & E-Learning OP1C010

Effects of the Synchronized Lifestyle Modification Program (SLP) on Metabolic Syndrome

Fareesa Waqar 1, Beenish Khurram 2
Riphah International University

Background: Metabolic syndrome is name for a group of risk factors for many diseases. SLP program personalizes lifestyle modification that induces homeostasis, balances biorhythms and balanced hormones resulting in auto correction of diseases like metabolic syndrome and PCOS. Objective: To study the effects of SLP on patients with metabolic syndrome

The study was conducted at Gynae/Obs Department, IIMCT Pakistan Railway Hospital in 6 weeks' duration from 1st Sep to 15th October 2020. Out of 50 patients, 25 were made to follow SLP program (Group A) while 25 were control subjects (Group B).SLP included daily exposure to indirect sunlight, correct water and probiotic intake, dietary modifications, exercise and stress management. After 6weeks of following the protocol, patients were called back. The data was compared and analyzed at SPSS version 20. Data collection tools included belly girth, weight, pelvic examination, pelvic ultrasound, hbA1c, lipid profile, uric acid, and blood hormonal profile.

There was a significant difference in general wellbeing of Group A patients.85 % reported an increase in happiness.48 % reported more balanced hormones.12 % increase in menstrual regularity .28% reported less pain during periods 5 % reported relief from Pelvic Inflammatory Disease (PID).4% reported more manageable Uric Acid whereas in the control group no significant changes were noted. Following SLP showed a significant improvement on not just tangible variables but also psychological wellbeing of patients. Patients reported their stress to be more manageable and decrease in their anxiety. Overall patients appreciated a holistic approach to dealing with their symptoms

Synchronized lifestyle modification program (SLP) is an integrative wellness program. It is very effective in management of diseases like metabolic syndrome and polycystic ovarian disease (PCOD).



Assessment-2 & E-Learning OP1C011

Physical Therapy Students' Perspectives On Online Learning During the Covid-19 Pandemic in Khyber Pukhtoonkhwa

Ali bin Asim Riphah International University

The COVID-19 outbreak is declared public health emergency. It has affected 209 countries including Pakistan. Like many aspect of daily life, the COVID-19 pandemic has had a serious impact on student's learning. The aim of this study is to determine the Physical Therapy students' perspective regarding online learning during Pandemic

A survey was conducted through Google forms using questionnaire adopted from the global survey "Impacts of COVID-19 on students' life", conducted by the University of Ljubljana from Slovenia. The questionnaire was based on what student life looks like during the COVID-19 pandemic, including teaching and learning, social contacts and how students were coping with the situation emotionally. The questionnaire has 14 sections, each has further items. Calculated Sample size was 302 with margin error of 5%. Study setting was both public sector and private sector institutes offered DPT or Master Courses in KP. Participants were Physiotherapy's students, attending online courses.



Oral Presentation 3: Clinical teaching

OP1D001

Descriptive Analysis of the Transparency of Canadian Medical Student Population: A University of Ottawa Study.

Kathryne Desautels, Julia Lauzon, Selya Amrani, Nicholas Brunet-Fillion, Etienne Rhéaume, Salomon Fotsing, Manon Denis-Leblanc.

University of Ottawa

Having a diverse medical school population enhances student preparedness to care for underserved communities, and increases patient satisfaction and access to care. Our purpose was to collect and report diversity data from across all Canadian medical schools, in order to promote transparency of Canadian medical school programs.

An online questionnaire surveyed the demographic, educational, and socio-economic backgrounds of the medical students at the University of Ottawa Faculty of Medicine, Canada. Survey data was collected from an online survey development cloud-based software "SurveyMonkey" which enabled the anonymous submission of information to ensure the protection of the privacy of our participants. Our study population consisted of all four matriculating cohorts (MD 2020 - MD 2023) of medical students in the undergraduate medical education program at the University of Ottawa Medical School, for a total of 655 students.

The response rate for the survey was 63.2%. A majority completed a 4-year degree (59.3%) and 79.7% had a GPA of 3.9-4.0. There was an under-representation of Black and Aboriginal students (2.9%, 2.5%). Only 8.4% of students reported financial barriers, with 55.2% having a household income of over CAD \$100,000. Respondents were diverse in immigrant (20.3%) and visible minority status (36.0%), and 24.2% reported overcoming social barriers. A majority of respondents (63.0%) expressed their desire to know more about the diversity of medical student population across all Canadian faculties at the time of their application to medicine.

The development of a National Student Diversity Database to Increase the transparency of diversity statistics in Canadian medical students could promote social accountability in medical education.



Clinical teaching OP1D002

Evaluation of Learning Approaches and Preferred Teaching Style Among Postgraduate Physiotherapy Students

Ambreen Iqbal, Ahsan Javed University of South Asia

To find out the evaluation of learning approaches and preferred teaching style among postgraduates' students of Physiotherapy

A survey questionnaire was used for 300 physiotherapy postgraduate students. From a total of 300 students we eliminated 50 for not responding to most of the following questions. The approach study skills inventory questionnaire was used in this study for evaluating the approaches of learning in post graduate physiotherapy students. Data was analyzed using SPSS and Chi square test was applied. Out of these mean and standard deviations was determined for consistent factors and all out factors with rates.

On analysis of 250 participants we found that 36.9 % student had learning approach 77.6% students had deep approach, 63.4% had strategic approach, 63.9 had surface approach and preference for different type of courses and teaching was calculated to be 32.5. With 120 male and 130 female students the mean is 1.5 and standard deviation is .5. On performing chi square test significance for learning approach was .06, for deep .2, for strategic .8, for surface .04 and for preference of different courses and teaching it was calculated to be 0.1.

The study concluded the results about the learning approaches among postgraduate physiotherapy students. The outcomes are steady with the foundation hypothesis on ways to deal with learning proving that contrasts



Clinical teaching OP1D003

Student Readiness to E- Learning in Clinical Medicine. Covid Experience of Gynecology Clerkship Students of Shifa College

Gulshan Ara Saeed Shifa college of Medicine

E-learning during COVID in undergraduate medical curriculum has a changed educational environment. Therefore, e-class dynamics and teaching strategies differ from those used in class rooms. The purpose of this study was to study relationship between student readiness to e- learning and student motivation, engagement and perception of e-climate

We used a validated questionnaire 3 to assess student readiness for e-learning in Shifa College of medicine fourth and final students along with a questionnaire based survey from the parents of these students regarding the COVID experience.

: Multiple regression analysis showed that student's e-readiness was a strong predictor of students' engagement and motivation in e-learning. Student who scored high on computer skills had a better perception of the e- learning climate. Parental feedback brought forward the issue of all institutions conducting their interactive teaching sessions at the same time leading to problems in provision of logistics and interruption free educational environment for more than one sibling creating a lot of parental stress.

Medical educationists need to incorporate technology based learning as an integral part of undergraduate medical curriculum. E- learning climate dynamics effect student engagement an learning



Clinical teaching OP1D004

The Application of Clinical Learning Online in Pandemi Covid-19 At The Faculty of Medicine, Mulawarman University

Anik Puji Rahayu Mulawarman University, Indonesia

The government's policy of implementing social distancing, work from home, and study from home to prevent the spread of the Covid-19 Corona has an impact on learning methods. It is necessary to modify the learning methods from offline to online to meet the continuity of the student learning process.

the design of the research is descriptive correlation analysis with the number of respondents 511 of the medical education study program and nurse diploma 3 study program. the number of questionnaires used was 44 statement items. This research is qualitative research. Respondents are random sampling. with data analysis correlation Spearman rho. the clinical learning methods for procedural skills is carried out by using online videos, supported by the lecturer's explanations with a 120-minute meeting, then the second stage students are given the task of making video procedural skills, and the third stage is review or response from a lecture.

The result of this study has a significant relationship between the perception the students who apply online clinical learning as seen from the aspect knowledge, skills and attitude with the effectiveness of learning in the pandemic covid-19 with a p-value=0,000 and the with strong relationship with the Spearman rho value 0,791, with the positive direction. So the application of skills learning online can be effective in the methods has program learning, be used with video learning in clinical skills studying, and then make video procedural skills to direct patient and then do review and response from a lecture.

Thus it can be concluded that the application of online clinical learning during pandemic covid-19 was effective. suggestion, to modify clinical learning methods with various blended learning or hybrid methods.



Clinical teaching OP1D005

Exploring The Usefulness of Medical Escape Room in Teaching of Medical Graduates

Lubna Rani Faysal, Rahila Yasmeen Riphah International university

The literature review was performed to explore the usefulness and effectiveness of medical escape room in teaching of medical undergraduates.

The literature search was carried out to identify articles most relevant to research topic and its objective from January 2004 to December 2019. The literature review was carried out following the protocol of the PRISMA-P: Preferred Reported Items for Systemic Review and Meta-Analysis Protocol. The electronic database search was carried out using search engines (Google Scholar) and databases including PubMed and Eric. Each search combined 2-3 of the following terms: medical escape rooms, medical education, dermatology and medical escape room and medical graduates teaching. Potentially relevant articles and communications were critically evaluated by the authors.

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The medical escape room is an innovative and emerging game-based strategy currently used for developing variety of technical and non-technical skills among medical students. Among the non-technical skills, it is mostly used in nursing discipline for team building, developing communication skills, promoting leadership skills and decision-making skills. Only few studies are available on use of medical escape room in teaching of core curriculum both in medical students and on the nursing side.

The findings of the literature review reveal very few studies on use of medical escape room in both undergraduate and post-graduate medical teaching, thus emphasizing the need for more studies



Clinical teaching OP1D006

The Association of Medical Student's Memory Ability and Scores with Different Learning Methods in UIN Alauddin Makassar

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Memory test aims to understand a person's ability to repeat the provided information and to analyze them into more complex and useful information. This study aimed to see the relationship between student's memory skills and their ability to follow learning methods in the medical program of Universitas Islam Negeri Alauddin

This research was conducted on 98 students among our 200 students. The final grade was taken from several courses which were categorized into three, namely offline, online, and blended learning. The memory ability is measured using the Intellegenz Structure Test (IST) instrument with a memory sub-test, which was given to each student at the beginning of the semester.

The mean score of students in those three categories of learning methods were 81.46 + 96.61; 68.52 + 11.92, and 65.11 + 10.76, for blended, offline, and online learning, respectively. This showed that the combined learning method is still the best method to produce high scores for students. Students' memory abilities are closely related to the scores they get. Poor memory abilities cause individuals to experience obstacles in completing tasks that require recall of memories. Adequate memory skills will become a useful tool in conducting synthesis analysis, namely being able to assess, sort, differentiate to formulate a solution

The memory test has a significant relationship with the ability of students to follow learning methods in the medical program of UINAM. Understanding student's need will improve the learning outcome



Clinical teaching OP1D007

Referral writing: a neglected skill

Faryal Azhar Rawalpindi medical university

Deficiencies of the current referral process and referral letter were taken into consideration. Expectations of specialists about the quality of referral letters were also taken into account.

• To find out the studies about problems in referral writing and their possible solutions. • To identify the gap in the studies.

Review period: articles of last 20 years Search strategy: The literature was searched by using PubMed, Pakmedinet, Eric and Google Scholar. Inclusion criteria: • All articles discussing the problems in writing referrals. • The articles describing solutions to the deficiencies in referral writing. • Systematic, Cochrane and meta analysis. • Last 5 years articles. Exclusion criteria:

- Articles in language other than English were excluded. Irrelevant studies were excluded.
- Duplicate articles were excluded. Use of Boolean operators AND and OR Articles included were 12 after Prisma checklist. Qualsyst percentage of 55% / score of 0.55 for critical appraisal.

Results: Themes were identified Referral Letters as a mean of communication between disciplines Identifying Problems in referral writing Referral Letters as a mean of communication Problems and their solutions in referral writing Referral writing curriculum Indicators for quality improvement of referral Challenges in referral writing

Conclusion: A widespread issue identified through the literature review is inappropriate referrals by junior doctors. Recommendation: teaching medical students referral writing skills.



Clinical teaching OP1D008

Case Study On Ethics Dilemma as A Learning Method in Achieving Competency of Ethicolegal Education Programs Module

Nasrudin Andi Mappaware Medical Faculty of Universitas Muslim Indonesia

Ethical and medicolegal competence is an important aspect of professionalism that must be possessed by obstetricians and gynaecologists. To support the achievement of these competencies, several methods of continuous learning and training are required by referring to the modules that have been established by the Collegium of Obstetrics and Gynaecologists.

Literature search and observation of learning activities for Obstetrics and Gynaecology Residency Programs, Hasanuddin University Faculty of Medicine in the ethics and law module using a case study approach of ethical and medicolegal dilemmas.

The standard Collegium ethics and law module were prepared as a learning reference for assessing the achievement of ethical and legal competencies. In this module learning activity, students of this programs conducted a case study with ethical and medicolegal dilemmas in medical service practice. Cases were analysed based on the basic principles of bioethics (Beneficence, non-maleficence, Autonomy, justice), clinical ethics "The Four Box Method" (medical indication, patient preference, quality of life, contextual features), and medicolegal aspects. Learning objectives to achieve competence.

A case study in the ethics and law module for Obstetrics and Gynaecology Residency Programs improves the ability to make clinical decisions that are dilemma and medicolegal-related.



Clinical teaching OP1D009

Students' Learning Supervisory Experiences: Impact of Workplace-Based Setting

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Clinical placement offers learning transformation from academic setting into a workplace environment affecting learning outcome. Supervision and feedback are key components for clinical teaching success. Unfortunately, such tension for learning under health service purpose are likely occured. This study aims to explore students' learning experience in term of supervision function

Twenty-seven fresh-graduate medical doctors were interviewed exploring their experiences of supervision and its relation to build their clinical competency. A phenomenology method was used to interpret our finding and be categorized accordingly. Finally, we sorted our findings in numerical order

Most students (66,6%) appreciated learning experiences with supervisor teacher during bedside teaching, case study and morning report. However, 25,9% only acknowledged small portion of supervisors' roles. About another 33,33% considered multi-parties function. One interesting finding was 55,5% students describing residency doctors' contribution in guiding their learning particularly on skill development. Workplace-based setting provides various social interactions supporting learning. Non design setting might occur as a valuable and critical learning experience but also creates risk to quality.

Unpredictability in clinical setting develop to unplanned learning experiences during placement. Students' learning supervisory might come from both formal and in-fromal parties.



Clinical teaching OP1D010

The Pinnacle of Technology Enhanced Teaching (Tet); Faculty Training Needs Assessment (Ftna) In Covid 19 Era

Dr Gulshan Ara Saeed/ Dr Maryam Barkat Riphah International University

COVID pandemic forced educational institutions to convert them on campus programs to a compatible online version. The faculty of most institutions was neither adequately prepared nor experienced in Technology Enhanced Teaching (TET) skills. The purpose of this study was to assess the training needs of TET in health sciences faculty

A descriptive quantitative cross-sectional survey Faculty members from four health sciences institutions were surveyed using random sampling. The survey questionnaire was developed by PI through literature review, sent for validation to 5 experienced medical educationists, modified in view of their observations and piloted on 3 faculty members. The items were marked on a 5 point Likert scale and shared with participants through google documents. Informed consent was taken electronically. IRB approval was sought

90 out of 110 faculty members sent the Performa responded (response rate of (81.8%)). The questionnaire's Cronbach alpha was 0.93. Participants were 70?male and 30% male with median teaching experience of 7years (S.D 6.35). Participants opinion regarding need for training in: software use: 77% strongly agreed (median 3.83, S.D: 0.81), use of different online educational strategies: 79.6% strongly agreed (median 4, S.D: 0.89), online assessment planning: 82% strongly agreed (median 4.25, S.D: 0.77), research writing:84% strongly agreed (median 4.3, S.D: 0.78), providing online feedback: 80% strongly agreed (median 4, S.D: 0.81) and student engagement online: 82% strongly agreed (median 4.2)

Planned, focused, and committed training using Teacher Needs Assessment to improve the online teaching effectiveness and skills of faculty are the need of the hour for faculty development



Oral Presentation 4: E-Learning-1 OP1E001

E-Learning During Covid-19 Pandemic: Obstacles Faced by Medical Students and Its Effect On Their Learning Attitude

Ayu Anulus, Artha Budi Susila Duarsa, Dasti Anditiarina Al-Azhar Islamic University, Indonesia

Covid-19 has had a serious impact on students, instructors, and educational organizations around the world in many other aspects of daily life. It could not happen overnight to move from an environment of conventional education to distance and online learning. At this stage, this rapid transformation is linked to different.

This was a cross-sectional study at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 260 medical students was enrolled in this study. The dependent variable was the learning attitude. The independent variable was learning obstacles. Data were collected using a questionnaire and analyzed using Chi-square.

Medical student's attitude was associated with obstacles they faced during online learning Covid-19 (OR= 2.25; p=0.001), and it was statistically significant. Most of the student's obstacles reported were the time limit for collecting assignments was not in accordance with the material load provided and the difficulty of learning clinical skills labs through an online class.

Online learning behavior is associated with the medical student's perception of online learning during the Covid-19 pandemic. Further study is needed to examine the other factors that will respectively associate with



E-Learning-1 OP1E002

Medical Student's Perception Toward Online Learning Behavior During Covid-19 Pandemic

Dina Qurratu Ainin, Artha Budi Susila Duarsa, Dian Rahadianti Al-Azhar Islamic University, Indonesia

Nowadays, online learning has become a widespread practice as an integrated education technology during the Covid-19 pandemic. Learning is best viewed from the perception of students because they have direct experience of it. This study aimed to analyze the correlation between medical student's perceptions toward online learning behavior.

This was a cross-sectional study at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 260 medical students was enrolled in this study. The dependent variable was online learning behavior. The independent variable was the student's perception. Data were collected using a questionnaire and analyzed using Chi-square table 2x2.

Medical student's perception was correlated with online learning behavior during pandemic Covid-19 (OR= 2.78; p<0.001), and it was statistically significant.

Online learning behavior is associated with the medical student's perception of online learning during the Covid-19 pandemic.



E-Learning-1 OP1E003

Medical Teachers: Factors Associated with Their Behavior Towards Online Teaching During Covid-19 Pandemic

Dian Rahadianti, Artha Budi Susila Duarsa, Dina Qurratu Ainin Al-Azhar Islamic University, Indonesia

During these unprecedented times of the Covid-19 pandemic, online teaching has allowed the continuation of medical education. Good online teaching practices should be adopted for efficient online learning. This study aimed to analyze the factors associated with medical teachers' behavior towards online teaching during the Covid-19 pandemic.

This was a cross-sectional study at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 43 medical teachers was enrolled in this study. The dependent variable was online teaching behavior. The independent variable were knowledge, attitude, and perception. Data were collected using questionnaires and analyzed using multiple logistic regression.

High knowledge (OR= 2.81; 95%CI= 2.01 to 5.51; p= 0.030), positive attitude (OR=2.19; 95%CI= 1.10 to 4.75; p= 0.041), and positive perception (OR= 5.02; 95%CI= 1.80 to 10.33; p=0.001) increased the online teaching behavior towards e-learning during pandemic Covid-19.

High knowledge, positive attitude, and positive perception are associate with good online teaching behavior among medical teachers.



E-Learning-1 OP1E004

Knowledge, Attitude, Gender and Their Association Towards Online Learning Behavior Among Medical Students During Covid-19 Pandemic

Dasti Anditiarina, Artha Budi Susila Duarsa, Ayu Anulus Al-Azhar Islamic University, Indonesia

All universities during pandemic Covid-19, including faculty of medicine, have moved to online learning. The ability of students to learn is as much influenced by their inter-and intrapersonal behavior as by their academic abilities. This study aimed to examine the association between knowledge, attitude, and gender towards online learning behavior.

A cross-sectional study was conducted at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 260 medical students was enrolled in this study. The dependent variable was e-learning behavior. The independent variable were knowledge, attitude, and gender. Data were collected using questionnaires and analyzed using path analysis.

The online learning behavior was directly affected and has a positive effect on good knowledge (b=0.58; 95%CI= 0.13 to 1.15; p=0.045), positive attitude (b=0.75; 95%CI=0.20 to 1.30; p=0.008), and gender (b=0.65; 95%CI=0.09 to 1.21; p=0.024). The online learning behavior was indirectly influenced by attitude and knowledge.

Online learning behavior is directly and positively affected by gender, knowledge, and attitude. Attitude and knowledge have indirectly influenced the behavior of online learning.



E-Learning-1 OP1E005

Impact of Online Exams On Education in Pakistan During Covid'19

Syeda Kiran Mansoor, Syed Asad Ahmed, Arjumand Ahmed, Erum Khurshid, Urooj Riasat,
Wajiha Gul, Rabya Munawar
Want to present as Poster
Dow university of Health & Sciences

The covid'19 pandemics has effected the whole world including the educational system as all of the institutions were closed. Most of the institutions were shifted towards the online learning system. The objective of this study was to find out the impact of impact of online exams on education during covid'19.

The method selected for the data collection was an online survey based form that was forwarded through different social media applications. The targeted group was the students from different schools, colleges and universities of Pakistan who had experienced the online examinations. In order to collect the information regarding the online sytem of education in most of the Pakistan's institutions the online google survey form was circulated.

Total 154 responses were received. According to the responses students faced the problems of internet connectivity, Time management, loadshedding and technical issues while the exam load was not appropriate and manageable. Although the students were satisfied with the grading but the virtual system created many hurdles in learning.

The online system created many difficulties, the students were overall not satisfied with the virtual exams. Measures should be taken in order to improve the standard of virtual learning.



E-Learning-1 OP1E006

Assessment of Undergraduate Medical Students' Perceptions About Online Teaching & Learning in Pakistani Public Sector Medical University

Syed Muhammad Ali, Dr. Farzana Fatima**, Prof. Dr. Rahila Yameen***
Riphah International University

Due to COVID19 pandemic, there was shift from the conventional face to face classroom teaching to online teaching in academic institutions across the globe. The study was conducted to assess the undergraduate medical students' perceptions about online teaching & learning in a public sector university.

The cross sectional quantitative survey was conducted with pre-clinical years MBBS students (188 students responded out of a total of 600 students attending the classes, because of lack of direct contact due to COVID19) of a Pakistani public sector medical university attending online classes through Zoom web-meetings software. The questionnaire was designed by literature review & search. It was validated by 5 expert medical educationists and was modified to the requirements of the objectives of the study. It was digitized with the help of Google forms and circulated as weblink. The quantitative data was obtained and descriptive analysis was done.

Among 188 participants 65.5% attended online-teaching sessions using cellphones. For 92% it was first-time online-learning experience. 66.5% students preferred face-to-face classrooms & considered online-learning as teacher-centered. 68.6% students claimed online classes ineffective for learning problem-solving skills. 55.3% found student-teacher interaction as minimum. 27% agreed that e-learning helped in IT skills enhancement. 58% students used lack of video-monitoring for non-academic pursuits during session. 56.4% held e-learning responsible for decreased academic performance. 51.6% students found shared teaching material helpful in learning. 69.1% students voted against online classes for teaching practical skills. There was dissatisfaction with online teaching as compared to classroom teaching.

Students were dissatisfied with online-learning experience & considered it poor alternative to face-to-face classroom teachings. Faculty training in online teaching strategies and student awareness will improve learning experiences of students.



E-Learning-1 OP1E007

Student's Perceptions Towards Online Learning Environment of Certificate Course in Health Professions Education During Covid Era

Khaulah Jawed, Sana Fatima, Rahila Yasmeen Avicenna Medical and dental college, Lahore

Objective: During the COVID era, all institutes in Pakistan abruptly shifted to online learning. This study aims to identify the promoting and hampering factors in the learning of the students and suggestions for the improvement of the online learning environment at the Certificate of Health Professions Education course, Riphah International University

Method: This qualitative study was conducted from August to September 2020 at Riphah International University after getting ethical approval from the respective University. To triangulate the sources of Information we have used the open-ended questions from Feedback Forms of the Certificate in Health Professions Education program and conducted interviews with the 8 students of the same program who volunteered to participate in this study after piloting the questionnaire. Semi-structured individual interviews were carried out using Zoom meetings and WhatsApp calls, recorded and shared among author and coauthor for coding and thematic analysis. The data were transcribed and thematically analyzed manually

Results: 8 themes and 40 subthemes were identified that exhibit learning promoting and hampering factors, along with the strategies to improve the online learning environment, which adequately answer the research question. The promoting factors included student interaction, motivation, relevant content, and supporting the role of faculty and staff. However, the hampering factors were technology effects on health and lack of trained facilitators. The suggestions for improvement included better planning of sessions, sequencing of the topics, time management, enhanced technology, and student support and training of faculty on teaching in an online learning environment. Member checking was carried out after the study.

Conclusion: This study shows overall satisfaction with the online learning environment of the Certificate in Health Professions Education program at Riphah University. However, hampering factors identified addressing them can improve learning.



E-Learning-1 OP1E008

Teachers' Perceptions of Netiquette Practices of Undergraduate Dental Students During Online Classes, In Covid-19 Pandemic

Sana Iqbal, Fatima Ali Riphah International University

The COVID 19 pandemic has changed education globally. Pakistani medical institutes had to shift from face to face teaching to e-learning. Literature lacks evidence of research on netiquettes practice by students in Pakistan. The aim of this study is to assess the use of netiquettes practices, through Dental teachers' perspectives.

It was a descriptive quantitative cross-sectional survey study design. The data collection instrument was developed on Google Forms and was validated by 5 medical educationists. The sampling technique used was Non- probability convenience sampling. Due to covid pandemic, limited faculty members were accessible. Ethical approval had been taken from Ethical Approval Committee.65 Faculty members of one dental institute in Islamabad were sent the questionnaires through WhatsApp and email.52 participants responded. Response Rate was 80%. The results mentioned below were analysed Quantitatively.

The result of the study reported that 72.9% of the respondents were not aware of the netiquette rules, standards, and practices before and during online teaching experience.51.1 % reported that a code of conduct, based on self-understanding of teachers, was provided to students. 63.4% mentioned a lack of formal policy at institutional level, regarding netiquette standards and practices. Majority of the faculty members,90% reported agreement on inclusion of netiquette standards in undergraduate dental curriculum and as an institutional policy.

There is a need to formulate guidelines at the institutional level regarding netiquettes in and incorporation in the official curriculum of online/blended programs, thus improving quality of online medical education



E-Learning-1 OP1E009

Assessing The Perception of Undergraduate Dental Students Regarding Effectiveness of Online Small Group Discussion Sessions

Laila Shakeel Abbasi, Taliya Sajjad Riphah International University

COVID-19 disrupted the whole world including the teaching and learning in academic institutes. The traditional teaching methods were deemed unsafe and were replaced by live or asynchronous online teaching. The aim of this study was to assess the perception of the students regarding the the online Small Group Discussion sessions.

A quantitative descriptive cross-sectional survey study was conducted. Questionnaire was designed from literature review, to receive feedback on the online small group discussion sessions from the students. The questionnaire was sent to 05 Medical Education experts for reviewing. The sample consisted of 50 First Year BDS students at Shifa College of Dentistry. The selected students have had attended 3 modules (4 weeks each) of online teaching including daily SGD sessions. The purpose of the study was explained to the participants and informed consent was taken. The questionnaire was shared via Google Forms. data was analyzed using SPSS version 20.0.

The results of our study showed the students response towards the facilitation of Small group sessions in an online manner. The response rate of participants was 95.83%. It was observed that 59% students felt the online sessions to be interactive whereas 67% students believed that online sessions promoted their active participations. On the contrary it was noted that 52% of the students were unable to maintain proper attention throughout the sessions as compared to face to face learning sessions.

Online SGD sessions were perceived to be interactive by the students and encouraged their active learning and participation. However, concentration during the online sessions was difficult to maintain.



E-Learning-1 OP1E010

Stress and Well-Being of Rehabilitation Sciences Faculty During Covid-19

Rabia Zubair, Ayesha Afridi, Kiran Khushnood, Ayesha Butt Riphah International University

Responses to the Covid-19 pandemic have created a long list of new stresses for teaching faculty to deal with problems caused by the emergency conversion to online rehabilitation teaching. This study will investigate the impact of online teaching on stress and wellbeing of rehabilitation sciences faculty during Covid-19.

An online questionnaire tool was developed using Perceived Stress Questionnaire with 30 item & Teacher subjective well-being questionnaire with 8 items. Different rehabilitation institutes in twin cities, Lahore, Karachi and KPK's faculty were approached through emails and other social networking websites from 1st November 2020. The response rate until now is 13% due to which analysis and results are awaited. Both gender, rehabilitation faculty taking undergrad/postgrad, online/hybrid lectures are included in the study. The participants not engaged in online teaching, not willing to participate or incomplete questionnaire responses are not included in the study.

Total 31 females and 19 males aged between 24 – 41 years participated from rehabilitation institutes of Rawalpindi, Islamabad, Peshawar, Mansehra and Sawat as yet. Majority of teachers have shown positive responses in teacher's subjective wellbeing questionnaire. While responses in perceived stress questionnaire has shown increased burden and are usually occupied with tasks with lots of things to do usually. The participants feel irritable, lonely and tired having difficulty in staying relaxed and do leisure activities.

Covid-19 pandemic has affected the stress and wellbeing of the rehabilitation faculty causing them to feel more occupied stressed, irritable and tired.



Oral Presentation 5: Curriculum / Clinical Teaching OP2B001

Keeping Up with The Times? Innovations Proposed by Faculty in Medical Curriculum

Fahad Azam, Abida Shaheen, Hania Naveed Shifa College of Medicine

Introducing frequent innovations in medical curriculum is vital for healthy education environment but difficult task keeping in view ethical considerations, feasibility, cost effectiveness, burden on available resources and consensus of faculty. A special meeting of faculty of Shifa College of Medicine was held to introduce potential innovations in medical curriculum.

We made five groups and placed faculty members in different groups according to the involvement in their respective year of curriculum delivery. Each group was given the task to identify potential areas for innovation and propose methodology for these innovations along with objectives and benefits of the proposed innovations.

Faculty of year I and II, mainly comprising of basic medical sciences identified patients as educators as a potential innovation. Faulty proposed use of videos, direct interaction of patients with students and patients narrating their stories to students as potential methodology. Faculty of year III which comprises of preclinical sciences proposed students as partners in planning, delivery and assessment of the curriculum. Year IV and V faculty comprising of preclinical and clinical sciences identified multiple community based awareness activities as potential innovations. Our faculty did not suggest use of modern technology as potential innovations in medical curriculum due to financial constraints.

Education environment is greatly influenced by innovations and reforms in teaching methodology and assessment tools. Participation of faculty, students, physicians, patients, community members is important to meet future healthcare needs.



Curriculum / Clinical Teaching OP2B002

A Delphi Consensus Study to Identify Anatomy Component of the Urogenital System for Teaching Medical Students

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Anatomy is an important basic science in medical education. Changes to the modern medical curriculum have an effect on reducing anatomy learning time. This study aimed to identify the core anatomical materials of the urogenital system for medical students

This qualitative study ued the two-round Delphi method. The subjects were general practitioners in Indonesia who were selected by purposive sampling according to the inclusion criteria that had been established. The first-round questionnaire was filled by giving important or not important value to the existing anatomical materials. The panel could add new materials in the first-round. The results of the first-round questionnaire were processed into the second-round, that then were rated with a range of 1-4 according to the importance level by the panel. The consensus level set at 51%.

The first round of Delphi produced 215 from 264 anatomical materials to be processed in the next round. The second round Delphi produced 68 anatomy core materials of urogenital system with clinical correlation in the material that was considered important by the panel. The anatomical core materials of the urogenital system that needs to be known by medical students are 68 materials from 264 anatomical materials compiled in the questionnaire.



Curriculum / Clinical Teaching OP2B003

Perceptions Regarding Proctoring Students for Authorship Authenticity in Zoom/Google Meet Based Invigilation; A Teachers' Perspective

Muhammad Waqas Rabbani, Faizan Munir Khan and Rahila Yasmeen Riphah International University

Shifting to online assessment increased threat to authorship authenticity. Cheating increases in asynchronous and non-proctored assessments, but proctored exams have a different set of challenges. This study was conducted to explore the lived experience of medical teachers about online proctoring the students for authorship authenticity in the online exams.

A qualitative study was carried out after modular online assessments, among the instructors and module directors, to explore their lived experience on the practices of proctoring and challenges associated with it. The data collection was done through a focus group discussion. There was a total of 9 participants in one focus group; three were module director, and six were instructors. Data were analysed inductively using a framework analysis approach with Atlas.ti. Rigour of the study was maintained through analysis/researcher triangulation, member checking, reflexivity and peer debriefing.

In the first step, the research team identified 155 codes from the transcription. Five themes emerged from these codes regarding proctoring. The themes were (1) significance of proctoring during the online assessment, (2) challenges in ensuring authorship authenticity, (3) patterns students show while cheating, (4) reasons why proctors fail to proctor and (5) strategies to tackle cheating activity. Both instructors and module directors agreed unanimously on the significance and challenges of proctoring. Though, was a difference in opinion in reasons for failing to proctor and strategies to tackle cheating.

Ensures authorship authenticity is a multi-faceted phenomenon with lots of moving parts. As one part cannot function without others; therefore, for success proctoring multiple strategies must apply.



Curriculum / Clinical Teaching OP2B004

The Relationship Between the Level of Student Satisfaction with The Primary Service Strengthening Program with UKMPPD Graduation

Shofiyah Latief, Amir P.Amir, Nasrudin A. Mappaware, Andi Alamanda Irwan, Shulhana Mokthar, Sri Ainun Zainal Siddiq Medical Faculty of Universitas Muslim Indonesia

The process of quality assurance is a strategic matter implemented by educational institutions. Measuring the level of student satisfaction is one method of evaluating them. Therefore we need to know how the students feel about the innovation of institution Primary Service Strengthening program and the relationship with the UKMPPD results.

This research is a descriptive analytic study with a quantitative design with total sampling. The participants were the students in the clinical phase who take the medical professional program student competency test (UKMPPD) batch I (February 2020). All participants were then asked to fill out a questionnaire about satisfaction with the primary service strengthening program implemented in the institution. The programs are small group learning (SGL) in the first week of each stage, clinical skills training (CST), OSCE section in each department and experts lectures/seminar (based on SKDI). Then we analyzed based on the graduation of UKMPPD.

The number of samples in this study were 68 participants. The highest level of student satisfaction with the Primary Service Strengthening Program at UMI's Faculty of Medicine was obtained (100%), namely tutorial in the Small Group Learning (SGL) program, Clinical Skill Training (CST), OSCE Section and Expert Lectures/seminar. There is a relationship between the level of student satisfaction variable towards the Primary Service Strengthening Program and the UKMPPD Graduation Result in the batch I (February 2020 Period) at FK UMI with a significance value <0.05 (using the Pearson method) and a positive direction.

It is found that the relationship between the two variables has a high significance level, so we suggest that the program will continue with improvements.



Curriculum / Clinical Teaching OP2B005

The Correlation of Metacognitive and Studying Motivation in Medical Students Academic Integrity in A Medical School

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academic integrity is a major part of academic culture. However, there are few data on understanding of academic integrity among medical students. It is expected the performance of student academic integrity can further improve the behavior of student academic integrity. Student performance can be improved through metacognitive and learning motivation

This study uses proportional stratified sampling with a sample size of 156 students in the academic stage of the year 2017,2018,2019, from the results of data collection with a questionnaire. The research design used was the cross-sectional method. Data analysis in this study used the Chi-square test.

The results of the statistical test, there was no correlation between metacognitive and academic integrity (p=0.365) and learning motivation with academic integrity (p=0.077) There was no correlation between metacognitive and learning motivation with the academic integrity of students in the academic stage. It is expected external factors are further improving academic integrity.



Curriculum / Clinical Teaching OP2B006

The Correlation of Coping Mechanism with Academic Integrity of Medical Students in Academic Stage

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Background: One of the factors affecting academic integrity is stress. During this pandemic stressor increase with online learning. The way to deals with stress is called the coping mechanism. Aims: To find the relationship between coping mechanisms and academic integrity behavior of students in the academic stage of Medical Faculty.

This study conducted using proportional stratified random sampling with a total sample of 128 medical students in entry years 2017, 2018, and 2019, the data from this study was collected from ways of coping questionnaire and adaptation from roff questionnaire. The design was a cross-sectional method. Data were analyzed using the Chi-Square test.

Most of the respondents have a moderate level of academic integrity behavior and emotion-focused coping mechanisms. Chi-Square test showed the result P-Value was P=0.102, which means it was above P < 0.05.

There was no correlation between coping mechanism with academic integrity behavior of a student in the academic stage. Training is needed to improve academic integrity behavior and appropriate coping mechanisms.



Curriculum / Clinical Teaching OP2B007

The Effect of Blended Learning with The Achievement of Competency of Internal Medicine Rotation at Clerkship Program

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The Covid-19 pandemic has an impact on all aspects of life including clerkship program. Clerkship program at Faculty of Medicine Universitas Islam Indonesia is modified into combination of online and offline learning or blended learning. This study aims to see the learning outcomes of blended learning compared with conventional program.

This study is a case control study that compares the competency of the young doctors at the Internal Medicine rotation between in a group of young doctors who underwent blended learning versus those who underwent full offline learning. Competency achievement is seen from the assessment score (Mini CEx, DOPS, clinical tutorial, journal reading, case reflection, OSLER, written test scores and final scores) in Internal Medicine. The statistical analysis used was descriptive analysis and the Independent Sample t-Test. The difference is significant if p <0.05. This study has obtained ethical clearance from the Ethics Committee from FM UII. Initially 30 young doctors were selected for each group, but complete data were obtained

from 13 young doctors were selected for each group, but complete data were obtained from 13 young doctors who underwent blended learning and 18 young doctors who were undergoing the offline stage. There were significant differences in the MiniCEx, DOPS, journal reading, written tests and final scores between the two groups with p value in sequence 0.028; 0.037; <0,01; 0.03 and 0.01. Meanwhile, the DOPS, clinical tutorial, and OSLER values were not significantly different. The scores obtained by the offline group were better than the blended learning group.

The competency achievement in blended learning was lower than offline learning for the clerkship program. It will be better if clerkship program carry out offline at the hospital.



Curriculum / Clinical Teaching OP2B008

Essential Components for Implementing High-Quality Objective Structured Clinical Examination (OSCEs): A Scoping Review

Khaled Almisnid, Matt Homer, Richard Fuller, and Trudie Roberts
University of Leeds

The OSCE is one of the most common instruments used to assess medical students' clinical skills. The OSCE is widely adopted for high-stake exams, yet it is often implemented variably across institutions. Identifying the OSCE components that consistently produce high-quality OSCEs would allow the implementation of valid and reliable OSCEs.

A scoping review was conducted to explore the available literature concerning OSCE design and implementation. The search terms were: OSCE, medicine and undergraduate. For inclusion, articles were required to be written in English, have search terms in the titles or abstracts, and discuss the OSCE implementation and design process. The 'advanced search' option was used to combine search terms in nine databases: PubMed, Ovid Embase, Global Health, PsycINFO, MEDLINE, Web of Science, Cochrane Library, ERIC and Scopus. The reference list of each included article was manually searched for additional articles that also met the scoping review criteria.

The search found 554 publications, but only 39 met the inclusion criteria. Analysis of these papers revealed that the common key components essential for producing high-quality OSCEs included: establishing an examination planning board; conducting thorough blueprinting; training the exam organisers, station writers, and assessors; training simulated/standardised patients; using validated scoring sheets; planning the venue logistics; undertaking post hoc psychometric analysis; evaluating the implementation process; and giving and receiving feedback from different stakeholders to inform development of subsequent implementations.

Implementing OSCEs is a complex task – a multifactorial process in which each component can affect the overall quality of the assessment. Appropriately employing these components could help implement high-quality



Curriculum / Clinical Teaching OP2B009

Can 3D-Printing Change The Shape Of Anatomy Assessments For Medical Students?

Wing Lam Sharon Yip and Nivetha Manobharath University College London Medical School

3D-printing is a rapidly developing resource in medical education. However, there remains a paucity of literature on the use of 3D models in assessment. This study aims to evaluate the acceptability and feasibility of using 3D-printed anatomy models in formative assessment from student perspectives.

Synthetic 3D heart models were incorporated into an object-based curriculum for year 1 medical students, including model-based teaching, revision at home, and a formative anatomy assessment. The assessment involved identification of anatomical structures on the model (such as coronary vessels) with related functional anatomy questions. The acceptability and feasibility of the assessment were evaluated using a mixed methods approach. Questionnaires (employing Likert scale ratings and qualitative questions) were opportunistically sent to students to complete in real time after a lecture. Finally, focus groups were conducted with volunteer students to explore questionnaire findings. Qualitative data was subjected to thematic analysis.

89% of students (68/77) found the assessment overall acceptable, 47% (36/77) found an impact on learning one-month post-assessment. Thematic analysis of focus groups (4 students) and 77 qualitative questionnaire responses identified four major themes related to assessment: (1) Reproducible assessment; (2) Acceptability: an ideal first assessment, concerns over assessment without real anatomy; (3) Feasibility: impact of model features on assessment format and difficulty; (4) Assessment limitations: unfamiliar assessment tool, only external structures shown. There were also three major themes related to learning: (1) Additional learning tool; (2) Model: key step between 2D and real life; (3) Model motivates learning.

3D-printed models have a pivotal role in anatomy assessments, with student acceptability and enhanced assessment experience. Consideration of the impact on realism and assessment format is recommended for curriculum integration.



Oral Presentation 6: Educational Strategies/ Flipped Classroom/Assessment OP1C001

How to Apply Heutagogy Rather Than Pedagogy When Teaching Academic Students - A State-Of-The-Art Review

Slavko Rogan, Jan Taeymans, Evert Zinzen
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Modern technologies such as digital media or application of blended learning, can promote active learning attitudes among academic students. These tools have the capability to impart knowledge and new competences of students. This rapid review wants to present an overview of teaching methods which followed an andragogical and heutagogical approach. The MEDLINE, ERIC, CINAHL, and Embase databases were searched for articles reporting teaching methods that stimulate active learning processes in health professionals' students (HPS) and medicine students (MS). References were searched in Google Scholar. We screened and extracted articles according to inclusion and exclusion criteria from titles and abstracts. Full text of the included studies were read and different teaching methods were extracted. Inclusion decision and data extraction was performed by two independent researchers.

Nineteen articles (physiotherapy=2; nursing=6; healthcare=1; medicine=10) found that teachers in a classroom setting should apply teaching techniques that correlate with the actual behavioral habits of the HPS and MS. HPS and MS from Generations Y (born: 1981 – 1995) and Z (born: from 1996 +), show the best digital literacy. They are now enrolling in higher education programs. Especially the flipped-classroom method, a form of BL seems to be associated with learning gains in UHP and ME compared to frontal instruction.

The use of the flipped-classroom method with incorporated Web 2.0 and DM proportions are recommended to promote active learning attitude in UHP and ME students.



Educational Strategies/ Flipped Classroom/Assessment OP2C002

Comparison Between Effectiveness of Flipped Classroom and Team Based Learning in Medical Teaching

Attia Zaman Riphah International University

There is paradigm shift from traditional to active learning formats for undergraduate teaching. For classes with large number of students, TBL is more effective than traditional. Flipped classroom combines e learning and face teaching as active problem solving. Objective of this literature review is to compare effectiveness of FC and TBL

ERIC,PubMed and google scholar were utilised to identify articles-limited to English-mapped to medical subject heading terms"flipped classroom",or"inverted classroom"or "blended learning" and "team based learning"or "TBL"or "comparison between flipped classroom and TBL". The primary aim was to review FC and TBL papers, these terms are often used interchangeably in literature, and instructional techniques fall between true "flipped classroom" and "TBL" and "blended learning". All these terms were used and included for initial research

Initial search found 426 papers using either quantitative (hypothesis testing or observational investigation of educational interventions), qualitative or review methods. The literature search included a literature review period of ten years. Appraised studies lacked data regarding learning outcomes and mostly it was reliance on students' perceptions of benefits of pre class learning material and team based learning and flipping the classroom.

No strong study supporting choice of pre reading material and class engagment. Its crucial to conduct studies to assess students performance on examination using students treated to different instructional modalities



Educational Strategies/ Flipped Classroom/Assessment OP2C003

TBL Versus Interactive Lecture in Achieving Learning Outcomes and Improving Clinical Reasoning Skills: A Randomized Crossover-Study

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Interactive lecture (IL) is a well-established teaching strategy. In contrast, team-based learning (TBL) is a relatively new instructional method in our institution. The objectives were to investigate the impact of IL or TBL for improving clinical reasoning skills (CRS) and achieving learning outcomes (LO) and exploring students' perceptions.

This study was carried out at the Faculty of Medicine in Rabigh, King Abdulaziz University, Jeddah, Saudi Arabia. Two modules, endocrinology and emergency, were selected with clear outcomes. Students of each batch, in both modules, were divided into two arms. With a randomized crossover design, IL & TBL were used, for two separate topics in each module. After each topic, a quiz in the form of well-structured MCQs was taken. A comparison was made between the same module groups and between the students of both years in achieving LOs and CRS. P-value?0.05 was considered statistically significant. Students' feedback was obtained.

Outcomes were achieved by all groups of the two modules, with both instructional strategies, IL and TBL, the mean difficulty index was >70%. Group-1 and -2 in the emergency module (EM) and group-1 in endocrinology module (EdM) had better achievement with TBL, p=0.026, 0.016 & 0.02 respectively. While there was no difference in group-2 in EdM (p=0.132). Group-1 and 2, EM, and group-1, EdM, had better achievement of clinical reasoning skills with TBL, p=0.017, 0.01 & 0.04, while no difference in group-2, EdM, p=0.32. Mostly, students in both modules preferred TBL over IL, and especially they liked team application.

Students achieved LOs and CRS better with TBL as an instructional strategy. They proffered TBL over IL. It is suggested to include TBL, or increase its percentage, in the curriculum.



Educational Strategies/ Flipped Classroom/Assessment OP2C004

Remediation Strategies in The Undergraduate Medical Education: A Scoping Review

Juni Tri Astuti Univ. Muh. Surakarta, Indonesia

Medical institutions manage to improve the quality of graduate medical students. However, many medical schools overlook the remediation for medical students. Little known about the remediation strategies in undergraduate medical education (UME). This scoping review analyzed empirical evidence from peer reviews on the remediation approach adopted to improve student capability.

The terms of reference used in this review use the research framework by Arksey and O'Malley. A comprehensive search of six databases was conducted, including PsycInfo, Global Health, Embase, Medline in-process, other non-indexed citations, MEDLINE, Web of Science, and Scopus. We sorted a total of 755 articles at the start of the search. All research designs, both qualitative and quantitative, were included in this review. Independently, the first authors filtered and extracted articles and filtered relevant information. The study's findings were evaluated and categorized, utilize as a basis for qualitative and quantitative analysis. From a total of 755 articles, twelve articles met the inclusion criteria. The articles included in this review published from 2009 to 2019. Most of the research was conducted in developed countries (75%), and limited studies (25%) reported developing countries. Most of the research on remediation strategies were quantitative studies (83.34%), while the other studies were qualitative as much as 8.33%, and mixed-methods studies were 8.33%. Most of the studies examined students as participants (75%), and the rest were faculty staff or lecturers (25%). Four studies (33.33%) discussed the effectiveness of the remediation strategy.

This study's findings suggest that developing remediation stages includes four steps (IPCE) that combine various interventions and roles, ranging from students, peers, and schools.



Educational Strategies/ Flipped Classroom/Assessment OP2C005

Characteristics of an Effective Teacher: Modern and Islamic Perspective of Teaching

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Effective teaching is a key to gain knowledge and students 'learning. Characteristics like showing care, empathy, devotion, discipline, respect for students and timely feedback by a teacher are considered important aspects of effective teaching. The study aims to determine the alliance between modern effective teaching characteristics and Islamic perspective.

Data was searched by using Google Scholar under search terms like qualities of effective teaching, characteristics of Prophet Muhammad as a teacher, effect of emotional attachment on learning, active listening, climate of respect and learning. All relevant studies on effective teaching from modern and Islamic perspective were included till November, 2020. For Islamic perspective, verses of the Holy Quran and narrations, life events of Prophet Muhammad describing effective teaching were included. The comparison was done between modern teaching techniques and Islamic teaching practices taught by Allah Subhanahu Wa Ta'ala and practiced by Prophet Muhammad (S.A.W) at the end of study.

The indicators of effective teaching in both modern and Islamic perspective were determined i.e. commitment to work, knowledge, empathy, leadership, motivation, inspiration and to provide trust and respectful learning environment. The time management, controlling misbehavior is also important for effective teaching. The Muslim teacher's attributes in the Islamic Education are defined like Murabbi, Mu'allim, Mu'adib, Mudarrib, Muwajjih and Murshid. The Murabbi is responsible to provide knowledge with character building in reference being with Allah and Islamic Education Philosophy frame work. Attitude of Excellent Islamic educator towards students, oneself and colleagues improve quality of organizational culture and shape the excellent generation.

This study concluded that effectiveness of new teaching methodologies was far ago present in Islam in the form of the Holy Quran and in the conduct of Prophet Muhammad (S.A.W).



Educational Strategies/ Flipped Classroom/Assessment OP2C006

Effects of ELDOA and Post-Facilitation Stretching Technique On Pain and Functional Performance in Patients with Piriformis Syndrome

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Piriformis syndrome (PS) is a neuro-muscular condition, often underdiagnosed in clinical settings. This study will determine the effects of ELDOA and post-facilitation stretching of the piriformis muscle in PS. We aimed to compare the effects of ELDOA and post-facilitation stretching on pain, muscle length, and functional performance in PS.

A randomized clinical trial was conducted with 40 piriformis syndrome patients including both males and females, between the ages of 30–70. Patients were randomly assigned to the ELDOA or post-facilitation groups after assessments with the Numeric Pain Rating Scale (NPRS), Lower Extremity Functional Scale (LEFS), Piriformis Length Test and Straight Leg Raise (SLR). The assessments were done at baseline and at the end of the sixth week of treatment. Patients treated with ELDOA demonstrated significant improvement in pain (pre = 7.00 ± 2.75 , post = 3.00 ± 1.75), piriformis length (pre = 27.6 ± 5.54 , post = 36.8 ± 3.13), SLR (pre 36.40 ± 7.24 , post 67.5 ± 8.36) and LEFS (pre = 26.90 ± 12.24 , post = 58.10 ± 8.62), as compared with PFS group in pain (pre 6.00 ± 1.00 , post 2.00 ± 1.50), piriformis length (pre 28.55 ± 4.03 , post 38.8 ± 2.70), SLR (pre 40.60 ± 7.48 , post 74.25 ± 5.19) and LEFS: pre = 25.20 ± 7.66 , post = 66.30 ± 7.27).

It can be concluded that the post-facilitation stretching technique shows more improvement in pain, muscle length, SLR, and LEFS in patients with PS as compared to ELDOA.



Educational Strategies/ Flipped Classroom/Assessment OP2C007

Online Teaching During Covid-19 Pandemic - Faculty Need Assessment in A Public Sector Medical Institute

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Due to COVID lockdown an increased demand was observed for online learning systems, but lack of resources in IT proved to be hurdle in adaptation. The purpose of this study was to understand experience and challenges of faculty and understanding the ways to ease access of online teaching.

The research was conducted in a public sector medical institute, with an enrolled student body of almost 1700 undergraduates, within a time of 1 month. 101 faculty members volunteered to participate. The data was collected by filling pre-validated online questionnaires and by interactive sessions which were managed following strict SOPs.

The results showed that more than 70% of the participants found online learning less useful than traditional learning methods. More than 50?ced problems like poor internet connectivity, difficulty in using online platforms, and trouble converting traditional teaching notes to online lessons. Majority of the participants wanted to use online teaching methods even after the lockdown is over.

Although e-learning proved to be challenging at first, but with proper training of faculty and students, it became easier to cover the gaps in digital teaching-learning methodologies.



Educational Strategies/ Flipped Classroom/Assessment OP2C008

Impact of Cultural Stress on International Medical and Health Science Students in Auckland, New Zealand

Syed M. Shahid, Sheila G. Jacinto Eastern Institute of Technology

New Zealand is a multicultural country, where majority of postgraduate students are foreigners. Cultural stress is main challenge in academic performance of international students especially in the field of health science. This study was designed to determine the impact of cultural stress on international students in Auckland, New Zealand.

Total 240 international students were recruited from Universities and ITPs studying in the field of health sciences, followed by institutional ethical approval and informed consent from participants. The participants provided with 2-section survey questionnaire based on previously described 36-item Acculturative Stress Scale for International Students (ASSIS) questionnaire modified out concerning the target population and its relevance to the scope of this study. First section collected responses regarding demographics, whereas second was about cultural stress on feelings, behaviour and performance using a 5-point Likert scale anonymously. Data confidentiality was maintained in compliance to the requirements of Privacy Act.

Higher level of acculturative stress (ASSIS Score between 37.5-75) observed in 64% students while 36% showed lower level of acculturative stress (15-37). A 44% disagreed that they feel dissatisfied when others do not understand their own culture. Likewise, 32?el treated unequally in social situations who stayed in New Zealand for <6 months and affected by homesickness. About 40?el confident in terms of English language even being non-English speakers, as well as happy with a change in dietary pattern and choices. Total 40% were unafraid for their personal safety whereas 44% were concerned about future employment in local organisations.

Several factors including demographic, social, linguistic and financial contribute to acculturative stress among international students. Universities and ITPs should provide support to improve socializing and interaction with local students.



Educational Strategies/ Flipped Classroom/Assessment OP2C009

MedicHub Virtual Teaching Prepares New Doctors for the Transition from Student to Professional During COVID Pandemic

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Bart's Health NHS Trust

During the COVID-19 pandemic, many final year medical students were expected to "step-up" into their professional roles early. Universities worldwide were forced to cancel examinations and core clinical teaching essential for new doctors. MedicHub aimed to ease this difficult transition by equipping students with the necessary skills and knowledge.

MedicHub sought to tackle the understandable anxiety felt among new doctors during COVID-19 by identifying core clinical topics essential to safe and effective healthcare delivery at the UK entry level position. The program is an e-learning platform featuring original educational content designed and delivered by an enthusiastic team of junior doctors. Each MedicHub session includes an hour long tutorial delivered over Zoom focused on an interactive delivery and ample time for student questions. Rather than reiterating material learned at medical school, MedicHub sessions focus on equipping new doctors with the practical knowledge to safely manage patients on the ward.

MedicHub teaching sessions cover clinical presentations frequently faced by new doctors, common on-call bleeps, data interpretation and career planning advice. Thus far, we have delivered e-learning on chest pain, shortness of breath, headaches, acute kidney injury and upper GI bleeds. Feedback from students has been overwhelmingly positive, with comments highlighting the effectiveness of a case-based, interactive approach using e-learning specific techniques (such as an online chat feature). From the five delivered sessions, we have accumulated 31 feedback responses; from these, 26 responses (83.9%) have assigned the teaching a rating of "extremely useful" for its impact on professional progress.

The benefits of online teaching are extensive yet rarely exploited. MedicHub has demonstrated a successful method for delivering core competency based e-learning during unprecedented times when traditional teaching was infeasible.



Educational Strategies/ Flipped Classroom/Assessment OP2C010

Converting Raw Scores to Numerical Grade Equivalents: Standardizing And Normalizing Methodologies

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Selected response items in assessments generate score outcomes which are not in themselves scaled to a grade equivalent. The original distribution must be converted to the desired scale by means of an algorithm. We describe how this process can effectively be carried out, both for pass marks and merit grades.

Working with both real score distributions obtained from medical student exams and larger normalised ideal distributions, we explored a number of different methods for scaling raw scores to their scaled grade equivalents. We aimed to devise methods which (a) incorporated minimum change from observed student scores, (b) truly normalised the outcomes and (c) offered the possibility of converting to two different cut scores, one for the pass mark and one for a score representing excellence.

For ease of use and accessibility Excel spreadsheets were used for all calculations. A variant of the commonly employed algorithm was devised which minimises the discrepancy between observed and converted scores. Further through normalisation algorithm was also developed employing conversion to Z scores which is more in keeping with the underlying principle of the desired process. In total, six different algorithms were developed, with various potential applications.

Excel spreadsheets for each algorithms are available from the authors. The true normalisation calculation, with both pass score and merit score conversions, is recommended for high stakes assessment.



Oral Presentation 7: Lifestyle Medicine/E-Learning OP3C001

Online Learning Experience of Students During Covid-19 Pandemic in Pakistan

Erum Shah, Syeda Kiran Mansoor, Syed Asad Ahmed and Ammarah Dow College of Pharmacy, Dow University of Health Sciences

The Covid-19 pandemic hit various countries around the globe at the start of year 2020 and it has shifted the education system from face-to-face learning to virtual learning. That's why a survey has been conducted in Pakistan in order to determine the students' satisfaction level with online mode of learning.

To carry out this study, an online survey was conducted in Pakistan using the application "Google form". The questionnaire was forwarded through social media platforms to students of various educational institutes. The targeted audience were students of schools, colleges and universities of age group (15-31 years).

According to the survey results, majority of the students consider that virtual learning is difficult as compared to face-to-face learning (39.6% consider it difficult and 26.3% consider it very difficult). A significant number of students face difficulty in internet accessibility or connectivity (38cedifficulty and 10.6 ceextreme difficulty while accessing internet). 88.9% of students think that online learning has made them lazy. A significant number of respondents are not satisfied with online examinations (31% Unsatisfied, 15.7% Extremely Unsatisfied) and majority of them (79%) will not prefer studying online when the Covid-19 pandemic is over.

During this pandemic, online learning environment should be improved and students should be engaged in different activities like quizzes, presentations and assignments in order to increase their enthusiasm towards studies.



Lifestyle Medicine/E-Learning OP3C002

Effect of The Adaptation of Six Main Pillars of 'Lifestyle Modification' On Middle Aged Female with Metabolic

Saadia Sultana Islamic International medical college, Riphah university

It is an extremely important perspective of public health to find out whether a lifestyle modification (LSM) towards healthy lifestyle will reduce the severity of metabolic syndrome. Our objective is to provide evidence that a higher adherence to the LSM will be associated with decrease in the gravity of Metabolic

- Subjects: Middle aged females with any kind of metabolic syndrome according to the definition given in introduction (AHA) Number of participants: o Fifty middle aged females
- Settings: Railway teaching hospital, Islamic International Medical College Trust, Riphah International University, Islamabad. Data collection tools: o Prospective cohort study Variables of study: o Socio-demographic characteristics (sex, age, and education level), o Sleep o Dietary factors o Anthropometric data (BMI). o Medical history (prevalence of cancer, cardiovascular disease, and depression) o Any characteristics of metabolic syndrome on history, examination or from lab findings.
- study is still under process. Results will be compiled by the end of this month. will be incorpraten in a month Analyses will be performed using SPSS version 23. p-values < 0.05 will be statistically significant. This prospective study of middle-aged young females to find out a significant association between adaptation of LSM and a reduction in the severity of metabolic syndrome.

These results will suggest the significance of promoting LSM to maintain good metabolic health and will be helpful in allowance its use in our clinical practice.



Lifestyle Medicine/E-Learning OP3C003

Association Between Water Intake and Body Measurements; A Cross Sectional Study in The Students of A Pakistani Dental College

Fatima Ehsan, Abeerah Zainab Riphah International University

Generally young adults are assumed to be in peak physical condition but the current evidence is suggestive of declining health. The lifestyle adopted by our youth with superimposed covid pandemic has further worsened the situation. We need to realign our bodily ph and gut microbiota to maintain homeostasis

The study was conducted in G-7 campus of RIU from 1st Sep 2020 till to date. Students were oriented about the importance of lifestyle modification. A structured google questionnaire was then distributed among all students (100) in 18 to 25 years of age. Voluntary consent was taken from the participants for taking part in this 2 months study. Only 55 agreed to take part in the study and remaining taken as controls. Plaque index and salivary ph samples were taken. A follow up questionnaire was then followed by the post intervention samples along with the google feedback forms.

Out of 100 total students, mean age was 19.17±0.95, BMI was 21.27± 3.88. Salivary pH and plaque index of volunteers was 7.12±0.47 AND 0.19± 0.40 while for non volunteers, it was 7.48± 0.31 and 0.00±0.00 respectively. 75.7% of students had regular bowel habits but 64.3% had no fixed time of defecation. Total 70 students responded to a follow up questionnaire. 82.9% found the information on lifestyle modification to be effective and 62.9% are following the 4 SLP rules and have brought about change in their routine. However, post intervention salivary pH and dental plaque has to be measured again

Most health concerns affecting our youth are preventable and we need to reframe our health activities at undergraduate level for the benefits young adults should associate with healthier lifestyles



Lifestyle Medicine/E-Learning OP3C004

Lifestyle Factors In Mental Health Disorders

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Lifestyle factors can lead to mental health issues and contribute substantially to poor health outcomes and quality of life. Therefore a need was felt to identify lifestyle factors in patients with mental health disorders

Convenient sampling technique was used and patients of both genders and all age groups were included. Data was obtained through online google forms.

Out of total sample(n=40) 73% were males and 27%were females. 53% were single 45% were married and 2% were divorced. 50% were having depression, 40% had anxiety and 10% had bipolar disorder. Adverse childhood experiences(ACE) were present in almost all participants. majority were not observing mindful eating, ignored or delayed breakfast and had inadequate or inappropriate water intake. Inadequate physical exercise, poor socialization and excessive exposure to screen were common

Lifestyle factors with adverse effect on mental health are common in patients with mental health issues. For a better outcome and prognosis we need to discuss and manage these factors



Lifestyle Medicine/E-Learning OP3C005

Survey Based Study On Home Remedies Found Effective in Covid-19 Pakistan

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Wajeeha Gul, Rabya Munawar.
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Corona Virus Disease-2019 (COVID-19) is a highly communicable disease with limited treatment options. As Pakistan is a country with limited resources these home remedies are an affordable and effective option for the population. The objective of this study was to find out home remedies helpful in COVID-19.

The method for data collection was online questionnaire prepared using application of Google Forms. The questionnaire was forwarded through social media outlets. The targeted group were recovered COVID-19 patients. Questionnaire was self-administered. This survey was carried out within Pakistan.

Total of 65 responses were received. According to these responses Milk, Honey, Ginger, Garlic, Citrus Fruits, Lemon, Senna Leaves, Boiled Chicken and Goat meat as well as their broth, Eggs, Vegetables, Green tea and Spices (Black pepper, Cinnamon, Cumin seeds, Black seeds, Turmeric, Liquorice, Cloves, Fennel) were reported to be effective. Theoretical and practical implications are discussed.

It was concluded that these remedies were alleviating the symptoms and regulating/strengthening the immune system. Further research on this topic is recommended.



Lifestyle Medicine/E-Learning OP3C006

Influencing Effect of Circadian Rhythm On General Mental Health and Life Satisfaction

Samia Khalid, Dr. Shagufta Feroz Riphah International University

Circadian rhythm, driven by suprachiasmatic core (SCN) inside the central system interconnected with the human immune system. There is convincing evidence that disturbance of the circadian can severely undermine mental health issues.

A survey research design with a purposive sampling technique was used in the present research. A sample of 379 males and females with the age range of 18 years to 53 years participated in it. To explore the study variables a 15 item scale to measure circadian rhythm (Byrne et.al, 2017), a 12 item scale for general mental health (Goldberg, 1972, and a 5 item scale (Dienel, 1985) for life satisfaction were used.

It was hypothesized that there would be a significant relationship among study variables, results revealed that circadian rhythm is positively correlated with general mental health and life satisfaction of the Pakistani population. It was also hypothesized that circadian rhythm and immunity would predict general mental health, and life satisfaction. The R2 values of study variables revealed that the predictor variables explained significant variance in outcome variables.

The present study focused on the intense effects of modern lifestyle practices and fostering synchronized lifestyle modification to align body rhythm and immunity for happiness, wellbeing, and life satisfaction.



Lifestyle Medicine/E-Learning OP3C007

To Assess The Impact Of Faculty Development Workshop On Case Cluster Mcqs Through Kirkpatrick Model

Tahira Sadiq IIMC, Riphah University

Faculty Development is considered imperative in promoting academic excellence. This study will not only focus on improvement in learning of faculty members after the workshop in terms of knowledge, attitude and skills but the main emphasis will be assess the impact after 3-6 months of workshop, using Kirkpatrick Model.

A quantitative program evaluation study based on first three levels ok KP model. The study was conducted at IIMC, from January 2018 to June 2018. Sampling technique was Census (n=75) for workshop followed by purposive sampling (n=31) to measure the impact. First two levels of reaction and learning were measured after workshop through satisfaction survey, MCQs and checklists, whereas behaviour was measured after 3-6 months of workshop on the same checklist. Impact was further validated by self reported survey of participant's behaviour and piloting on students.

In order to assess the impact of faculty development workshop results were measured on first three levels of KP model. satisfaction(reaction) of participants after the workshop (n=75, 15 groups) was 93.3 % on a 5 point Likert scale (p=0.00). Improvement in knowledge (learning) about construction of case cluster MCQs from pre-test(mean=3.53/10, p=0.00) to post test (mean=7.21/10, p=0.00) was highly significant. Skill was measured through hands on activity on construction of case cluster MCQ before and after the workshop, scored by observer on a checklist with 30 parameter. Significant improvement was found before(mean=1/30, p=0.00).

It was remarkable that a positive change in the attitude of faculty in construction of CC MCQs for assessing PBLs took place as result of a single day workshop.



Lifestyle Medicine/E-Learning OP3C008

Factors Influencing Medical Student's Satisfaction On E-Learning During Covid-19 Pandemic

Artha Budi Susila Duarsa, Dina Qurratu Ainin, Dasti Anditiarina Al-Azhar Islamic University, Indonesia

Education has been affected by the Covid-19 pandemic. The pandemic causes banned access to schools and universities. The students are moving into e-learning studies from the conventional study room. This study aimed to analyze the factors influencing the satisfaction of medical students on e-learning during the pandemic of Covid-19.

This was a cross-sectional study at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 260 medical students was enrolled in this study. The dependent variable was e-learning satisfaction. Independent variable were knowledge, attitude, and perception. Data were collected using questionnaires and analyzed using multiple logistic regression.

High knowledge (OR= 1.94; 95%Cl= 1.07 to 3.51; p= 0.029), positive attitude (OR=1.96; 95%Cl= 1.08 to 3.55; p= 0.026), and positive perception (OR= 7.02; 95%Cl= 3.90 to 12.63; p< 0.001) increased the medical student's satisfaction towards e-learning during pandemic Covid-19.

Medical student's satisfaction during pandemic Covid-19 increases by high knowledge, positive attitude, and positive perception. The university needs to provide a good e-learning environment to increase medical student's satisfaction.



Lifestyle Medicine/E-Learning OP3C009

The Relationship Between The Preferences Of Online Learning Methods And Self-Directed Learning Readiness (SDLR)

Diani Puspa Wijaya, Umatul Khoiriyah Faculty of Medicine Universitas Islam Indonesia

Pandemic Covid-19 has impacts on teaching learning in higher education. Faculty of Medicine UII develop online classrooms with several learning strategies. Students' self-directed learning (SDL) might impact the selection of learning strategies. This study was aimed to determine the relationship between self-directed learning and online learning strategy preferences.

This study was an observational study applied to first-year students of FM UII (n=132). Students' self-directed learning was measured through the self-directed learning readiness scale (SDLRS). Students were also asked their preferences for the learning strategies conducted by FM UII. A crosstab analysis was then carried out to see the relationship between SDLR FM UII students and online learning preferences.

Seventy students (53%) preferred to study using the flipped classroom, 47 (35.6%) chose synchronous lectures while 15 (11.4%) preferred to study independently of shared lecture materials online. Students selected flipped classrooms because they could access the material before the meeting and then could discuss deeply during the direct meeting with the lecturers. Students who preferred synchronous lectures argued that they could interact directly with lecturers. The majority of students (87,1%) had a high SDLR and 12,9% had a moderate SDLR. There is no relationship between students' preferences in choosing online learning methods and the SDLR level of students (p>0.05).

Students' SDL doesn't influence of preference of online learning methods. It's necessary to do further exploration of the factors that play roles in the selection of online learning by students.



Lifestyle Medicine/E-Learning OP3C010

Burnout Due to Online Learning in Covid-19 Pandemic Among Graduate Student in Yogyakarta, Indonesia: Problems and Solutions

Syifa Nurul Asma, Idlohatud Dilalah, Doni Widyandana Universitas Gadjah Mada

Most of the graduate program worldwide has implemented online learning system and plan to extend it since the unresolved pandemic condition. Indonesia has been implemented this method for about 10 months. This study aimed to evaluate burnout due to the online learning system in the graduate student during Covid-19 pandemic.

This is an explorative study using mix method to collect data on burnout in Maternal and Child Health-Reproductive Health (MCH-RH) and Health Behaviour and Promotion (HBP) concentration at graduate students of public health of Universitas Gadjah Mada (UGM). Thirty-one students were participated in this study. The data were collected using an online questionnaire "The Copenhagen Burnout Inventory" (Kristensen et al., 2005) covering personal, studies-related, colleagues-related, and teachers-related burnout added with three open-ended questions about the problems, solutions, and expectations about the online learning system. Data were analyzed using STATA

More than half of the students (58.06%) were categorized in moderate-severe level burnout (M-SB) on studies-related burnout. In opposite, 48.39% of students have M-SB on the personal burnout scale and only a few students have M-SB (9.68% and 3.23%) on colleagues - related, and teachers-related burnout. Working students tend to have M-SB. The study load, online connection problem added with other burdens may exacerbate student burnout. A break in the middle of lecture with little sport and regularly close the eye to avoid eye strain, sharing the problems with others, have time for hobby are ways to avoid burnout.

Studies-related problems may cause students to burnout more than colleagues or teachers-related problems during Covid 19 Pandemic. Giving short breaks of fun and relaxing activity during lecture sessions were suggested.



Lifestyle Medicine/E-Learning OP3C011

Educational Quality in Virtuality

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Currently, students have different ways of learning compared to older generations: they are more visual and practical. Additionally, education tends to evolve on its own, modifying the teaching-learning processes and requiring professors to reinvent themselves and their courses. Objective: To provide alternatives to on-campus in medical education through digital platforms

The Moodle platform has been fundamental in the asynchronical component of online-based medical education at the Universidad Pontificia Bolivariana. This platform has been an alternative to connect teachers and students, allowing for classwork submissions, grading and feedback. On the other hand, the Microsoft Teams platform is used for synchronical meetings where concepts are reviewed, and new topics are taught. The combination of these two platforms into a B-Learning strategy met students' requirements to complete the proposed curriculum of their courses at medical school

The B-learning strategy had a positive impact on the academic process of both students and teachers as involvement of the students in the real-time encounters and fulfillment of the individual activities stand out. Students have positively valued the experience as well, as they have reported feeling committed to their academic process and accompanied by school staff. In terms of academic failure, there has been no obvious difference between on-campus activities and online based education.

The change from on-campus to virtual education, the adaptation of teaching methods highlights the use of different virtual platforms that, combined, guarantee the continuity of learning in these atypical times



Oral Presentation 8: Medical Education Research OP3D001

The Prevalence of Gmc Sanctions Amongst Early-Career Surgeons

Ricky Ellis, Duncan Scrimgeour, Jennifer Cleland, Amanda Lee, Peter Brennan University of Aberdeen

Fitness to practice (FtP) investigations by the General Medical Council (GMC) can be one of the most stressful experiences in a surgeon's career. Demographic factors are known to alter the likelihood of GMC investigation. Despite this there are no studies assessing risk factors in surgeons for FtP sanctions.

We used the newly created Intercollegiate Membership of Royal College of Surgeons (MRCS) examination database to identify risk factors for and the prevalence of GMC sanctions in early-career surgeons. FtP sanction data contained in the GMC list of registered medical practitioners (LRMP) database was linked at person-level to all UK graduates who had attempted MRCS Part A or Part B between September 2007 and January 2020. Data were anonymised by the Royal College of Surgeons of England prior to analysis.

This was the largest study of MRCS candidates ever performed. Of 11,660 candidates who had attempted the MRCS within the study period only 31 (0.3%) candidates had GMC FtP sanctions within the last two years. Of these, 12 had active conditions on their registration, 7 had active undertakings and 14 had warnings. Candidate demographics were similar between cohorts and there were no considerable differences between MRCS performance identified.

The prevalence of GMC sanctions in early-career surgeons was well below the national average and as such will serve to greatly reassure surgeons and their patients.



Medical Education Research OP3D002

Measuring Preparedness of MBBS Students to Clinical Exposure During COVID-19 Pandemic

Humaira Fayyaz Khan IIMC

COVID-19 emerged as a severe respiratory disease in late 2019 in China which quickly spread throughout the world and turned into a global pandemic by March 2020. the Objective was to measure the level of preparedness of MBBS students to clinical Exposure to Covid 19 Pandemic.

Medical students from 1st to final year were included. Data was collected through a validated questionnaire measuring knowledge, attitude and practice of medical students regarding COVID-19. Statistical analysis was done on Microsoft Excel. Frequencies, percentages, mean, and Standard deviation were calculated

A total of 315 students were included for final analysis. Social media was the main sources of information 45.5% of the students. The overall level of knowledge of students about COVID-19 was 88% and 12 % had poor knowledge. The attitude had a mixed response of 55.5?ing confident that the disease would be controlled while 93.3% and 87 % of the students wanted to help and educate the society. Regarding practice 91% of the students had good practice and used face masks though poor practice were application of hand sanitizer and going out of home 68%.

The level of preparedness of MBBS students before clinical Exposure to Covid 19 Pandemic was satisfactory. Gaps in knowledge and the practice which were highlighted needs to be addressed.



Medical Education Research OP3D003

The Impact of Disability On Performance in A High-Stakes Postgraduate International Surgical Examination

Ricky Ellis, Duncan SG Scrimgeour, Jennifer A Cleland, Amanda J Lee, Peter A Brennan University of Aberdeen

To ensure discrimination is excluded in surgical training, as required by law, it is critical to know whether any attainment differences exist in markers of surgical performance. Thus, we assessed the impact of disabilities on performance on the high-stakes Intercollegiate Membership of the Royal College of Surgeons examination (MRCS).

This is the first study to comprehensively assess the impact of disability on performance at a postgraduate examination. All UK medical graduates who had attempted MRCS Part A (n=9,600) and Part B (n=4,560) between 2007-2017 with linked disability data in the UKMED (https://www.ukmed.ac.uk) were included. Univariate analysis identified associations with MRCS performance. Logistic regression was used to identify independent predictors of success.

Candidates with registered disabilities had lower MRCS Part A pass rates than their peers (p<0 p=0.339).>0.05). There was no statistically significant difference in pass rates between candidates with specific learning difficulties and those with other types of declared disability. Candidates with disabilities performed less well in written examinations throughout medical training, although our data indicate that the MRCS is fair and enables performance unrestricted by disability.



Medical Education Research OP3D004

Covd-19 And Final Year Medical Students' Learning Process in Oman: Exploring Knowledge, Consequences and Preparedness for Internship

Fatma Albusaidi National University of Science and Technology

Background: Coronavirus Disease 2019 (COVID-19) is a cluster of acute respiratory illness that was first identified in Wuhan Province in China. Aim: To evaluate the final year medical students' perceptions of their preparedness for internship and assess their awareness of COVID-19 and patients' management in the Sultanate of Oman.

Methods: A cross-sectional survey of cohort of final year medical students at Sultan Qaboos University (SQU) and National University of Science and Technology (NU) was distributed to 227 students in both medical schools from 21st to 28th of April 2020. A total of 99 students fully completed the survey with a response rate of 43.6%. The survey had five sections exploring perceptions on preparedness for internship and awareness and knowledge on COVID-19, training, and implications.

Results: Majority of participants (82.8%) were 24-26 years old. Omani students accounted for 88.9% of the participants. 81.4 of SQU participants were competent in carrying ward's practical procedures comparing to 39.3% of NU participants (p<0.05). There was a higher level of awareness of the current ministry of health policies on the management of patients with COVID-19 with NU participants than SQU (p < 0.005). Training on preparedness for COVID-19 was higher in females than males (p=0.02).

Conclusion: COVID-19 has affected the teaching process and limited student- patient interactions. The overall perceptions of preparedness for internship among medical students in Oman are good.



Medical Education Research OP3D005

Minnesota Multiphasic Personality Inventory-2 Test: Motivation Towards Grade Point Average Among Medical Students

Ayu Anulus, SST Al-Azhar Islamic University

During the medical school admission process in Indonesia, the Minnesota Multiphasic Personality Inventory (MMPI-2) is a common tool used to evaluate personality and psychological issues. The motivation of the medical student can be assessed using MMPI-2. This study aims to analyze the association between motivation and grade point average (GPA) This was a cross-sectional study conducted at Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 241 was enrolled in this study. The dependent variable was the GPA. The independent variable was motivation. Motivation data were obtained from the MMPI-2 test at the first medical school admission process. The data were analyzed using the Chi-square test of 2x2.

MMPI-2 result showed that out of 241 medical students, a total of 206 students were motivated (85.48%) and 110 students had a moderate GPA (45.64%). There was no association between motivation with GPA (p=0.473).

Motivation is not directly associated with the medical student's grade point average. Other factors should be studied simultaneously.



Medical Education Research OP3D006

Relationship Between Self-Confidence and Motivation: The Use of MMPI-2 In Medical Student Assessment

Irwan Syuhada, Artha Budi Susila Duarsa, Ayu Anulus Al-Azhar Islamic University, Indonesia

Self-confidence has gained growing prominence as one of the influential factors influencing academic performance. The study about self-confidence and motivation using the data from the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) test was rarely reported. This study aimed to examine the relationship between self-confidence and motivation among medical students.

A cross-sectional study was conducted at Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 241 medical students participated in this study. The dependent variable was motivation. The independent variable was self-confidence. The data of motivation and self-confidence were obtained using the MMPI-2 test. The statistical analysis used Chisquare.

Out of 241 medical students, 206 (85.48%) students had the good motivation and 35 (14.52%) had low motivation. 205 (85.06%) students had good self-confidence and 36 (14.94%) had low self-confidence. The results showed that motivation was associated with self-confidence (p=0.001).

The motivation is linked to the self-confidence among medical students at Al-Azhar Islamic University, Mataram, West Nusa Tenggara.



Medical Education Research OP3D007

Improving The Trauma and Orthopedic Experience for Junior Trainees

Charles Godavitarne, Ravi Mallina, Stella Vig Croydon Health Services NHS Trust, London, UK

Orthopaedic rotations in the UK are composed of junior trainees from different training programmes. Departments should aim to clinically support juniors whilst maximising educational opportunities. This study aimed to evaluate the perceptions of junior trainees across a number of domains within an Orthopaedic department at a busy district general hospital

A single-centre prospective study was performed. A questionnaire was designed incorporating 5 key domains from the UK General Medical Council (GMC) survey - 1) senior support during ward rounds and 2) during oncalls 3) access of educational opportunities 4) value of organised formal teaching 5) ability to book annual leave. Junior trainees previously attached to the department over a 1 year period, were asked to complete the survey (n=10) to establish a baseline. Results were analysed by the department and recommendations for improvements made. The same survey was completed by junior trainees in the department 4 months later

Baseline results identified that 71% of trainees felt that senior support was substantially lacking during wards round/oncalls. 100% of trainees felt access to educational opportunity was poor and 71? It the ability to book annual leave was troublesome. By redesigning the departmental rotas, junior trainees were provided with more senior support, whilst allowing access to dedicated educational days and an improvement in annual leave allocation. Twice weekly formal teaching was also made available. Improvements were assessed by monitoring responses every two weeks over a 12 week period. At the final review, significant improvements of 60-80%, were seen across all domains.

Improvements in senior support during ward rounds and oncalls is seen together with the development of a structured teaching programme. This is reproducible for other departments with junior trainees



Medical Education Research OP3D008

To Assess The Effect Of Slp Plan On The Anxiety And Stress Levels Of Undergraduate Medical Students

Tahira Sadiq Riphah International University

Faculty Development is considered imperative in promoting academic excellence. This study will not only focus on improvement in learning of faculty members after the workshop in terms of knowledge, attitude and skills but the main emphasis will be assess the impact after 3-6 months of workshop, using Kirkpatrick Model.

A quantitative program evaluation study based on first three levels ok KP model. The study was conducted at IIMC, from January 2018 to June 2018. Sampling technique was Census (n=75) for workshop followed by purposive sampling (n=31) to measure the impact. First two levels of reaction and learning were measured after workshop through satisfaction survey, MCQs and checklists, whereas behaviour was measured after 3-6 months of workshop on the same checklist. Impact was further validated by self-reported survey of participant's behaviour and piloting on students.

In order to assess the impact of faculty development workshop results were measured on first three levels of KP model. satisfaction(reaction) of participants after the workshop (n=75, 15 groups) was 93.3 % on a 5 point Likert scale (p=0.00). Improvement in knowledge (learning) about construction of case cluster MCQs from pre-test(mean=3.53/10, p=0.00) to post test (mean=7.21/10, p=0.00) was highly significant. Skill was measured through hands on activity on construction of case cluster MCQ before and after the workshop, scored by observer on a checklist with 30 parameters. Significant improvement was found before (mean=1/30, p=0.00).

It was remarkable that a positive change in the attitude of faculty in construction of CC MCQs for assessing PBLs took place as result of a single day workshop.



Medical Education Research OP3D009

Comparative Analysis of Clinical Clerkship Location Towards Objective Skill Clinical Examination's (Osce) Score of Clinical Clerkship Studente

Marlyanti Nur Rahmah AkibShofiyah Latief , Nasrudin Andi Mappaware, Dian Fahmi Utami Medical Faculty of Universitas Muslim Indonesia

Clinical skills are part of competencies that Clinical Clerkship Student has to achieve and done in hospital and evaluated with OSCE's method. The purpose of this study is to tell the difference in the achievement of clinical skill's competency score that worked at networking hospital in and outside of Makassar

This study done by descriptive analysis with retrospective approach. The data analized using Mann Withney test.

The sample of this study is number of clinical clerkship students of Medical Faculty of Universitas Muslim Indonesia between January-December 2019 period in total 1.723 students in consists of 1.207 students at networking hospital in Makassar with OSCE's grade average 81,65 and 516 students at networking hospital outside of Makassar with OSCE's grade average 81,77, then from Mann Whitney test obtained Asymptotic Significance (2-sided) score is 0,544.

There is no significant difference between OSCE's score of clinical clerkship student at networking hospital in and outside of Makassar. The determination of clinical clerkship location can be done flexibly.



Medical Education Research OP3D010

Basic Research Workshops for Medical Students: Strengthening Grassroots for Research in Developing Countries

Russell Seth Seth
The Aga Khan University

In Pakistan and other developing countries, the quality and quantity of healthcare research leave a lot to be desired. To address this issue at a grassroot level, our study aims to assess the impact of research workshops (RWs) designed to teach essential research skills to undergraduate medical students in Pakistan.

A series of RWs teaching basic research skills to undergraduate medical students were conducted over 25-26 January 2020 at the Aga Khan University, Pakistan. To evaluate the efficacy of the RWs data was collected through forms which included a pre-RW assessment of baseline research skills, pre- and post-RWs self-proficiency ratings (lowest: 1- highest: 10), post-RW feedback, and a 6-month follow-up survey conducted in July 2020.

Out of 187 students in the RWs, 172 returned a complete set of forms (response rate 92%). Only 18% reported prior involvement in any sort of research activity. Participants reported highly significant improvement in self-proficiency for learning objectives covered in all six RWs (all p<0.001). 88/187 (47.1%) responded to the 6-month follow-up survey. 78% students reported involvement in research projects during the 6-months after attending the RWs, as compared to their involvement before attending the RWs (26.1%; p<0.001). 18 (20.5%) students reported having peer-reviewed publications 6 months post versus only 3 (3.4%) peer-reviewed publications before the RWs (p<0.001).

Our results demonstrate the effectiveness of RWs in improving the quality and quantity of research output amongst medical students in Pakistan, which can help increase the country's research output.



Medical Education Research OP3D011

Academic and Social Self-Perceptions of Undergrad Physical Therapy Students: Qualitative Analysis

Saira Jahan Riphah College of Rehabilitation & Allied Health Science

Background: The students' academic self-perception is related to the ability of the students to cope with the academic overload. Students' social-self perception contributes to the development of social adjustment and is associated with peers' acceptance. Objectives: To determine the students' academic and social self-perception of undergrad physical therapy students.

A qualitative study was conducted at Riphah College of rehabilitation and allied health sciences. The sample was recruited through purposive sampling and two focus groups were designed from first & final year of Doctor of Physical Therapy. Each group had 8 students. The focus group discussion procedure was used and one senior student was nominated as moderator. The discussion points were taken from The Dundee Ready Educational Environment measure (DREEM). Discussion points were focused on students' academic self-perceptions and students' social self-perceptions. The focus group discussion was audio recorded and later transcript was translated into English. Thematic analysis was done

The majority of students are not well aware about social self-perception; the schedule leaves them no time to socialize. As far as students' academic self-perception is concerned, a clear gap has been identified between theoretical and clinical. The real patients management is highly motivating factor in clinical placement.

The social and academic perception is not up to mark and need to address them through making certain changes in curriculum. The focus must be on outcome based curriculum and



Oral Presentation 9: Professional ethics/Professionalism OP6C001

Medical Students' Attitudes Toward Ethical Issues Encountered in Clerkship Rotation

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Clerkship rotation is one of the most important phase in medical education. In this phase, medical students will encounter various ethical or professional problems that arise during the learning process. The study was conducted to explore medical students' attitudes toward ethical issues encountered while participating in clerkship rotation

The study used phenomenology methods with in-depth interviews to find out students' feelings, judgments and wishes toward ethical issues encountered in clerkship rotation and how they deal with the situation. The subjects were 10 medical students who at least had attended 4 departments in clinical rotation.

Students chose to remain silent in facing ethical issues in clerkship rotation. Rather than criticizing, they preferred to question the situation to other doctors or discussed it with other students. Besides being felt as vulnerable groups because their future were determined by the doctors, they avoided to argue in case of hierarchy. The next reason was group conformity. Students could reduce the discomfort feelings when everyone seemed not to care. Students also noted that they became indifferent as the effect of burnout on thinking about the same all the times without any solution.

Students chose to remain silent in facing ethical issues in clinical rotation, however it was evident that students were learning, absorbing and more aware of what they were observing.



Professional ethics/Professionalism OP6C002

Impact of Teaching Ethics in Undergraduate Medical Curriculum On Clinical Practice in House Job

Aisha Rafi, Usman mahboob, Raheela yasmin Shifa college of Medicine

A review of the literature was carried out laying the foundation of research problem about the ethical issues encountered in real-life by the house officers. The objectives of the literature review were to find the impact of undergraduate medical ethics teaching on dealing with ethical issues in house job

The databases PubMed, PsycINFO, Google Scholar were searched for the articles fulfilling the inclusion criteria. The quantitative, qualitative and mix-methods study, systematic and narrative reviews were included addressing the research question, what is the impact of undergraduate medical ethics teaching on dealing with ethical issues during house job training? The included studies were exported in Mendeley reference manager and later on analyzed by quality assessment tool,QualSyst. Databases identified 900 studies, 838 were excluded after title/abstract screening, leaving 62 studies. Further 49 full-text studies were excluded after applying the inclusion and exclusion criteria. Only 13 studies were eligible for study.

The literature review synthesizes six themes. The first three themes, teaching medical ethics, impact of assessment in ethics on undergraduate teaching and learning ethics, impact of ethics teaching on proposed behavior in early clinical practice, describe the undergraduate medical ethics teaching and assessment and expected outcomes of the ethics curriculum. The last three themes, medical ethics for junior doctors, moral distress experienced by junior doctors, need for exposure to real-life ethical dilemmas in medicine, provide an insight to real-life problems faced by house officers after graduation and stress the need to address them in undergraduate medical curriculum.

The ethical issues encountered in real life should be incorporated in the undergraduate medical ethics curriculum to prepare the graduates to deal with ethical dilemmas in real-life clinical practice.



Professional ethics/Professionalism OP6C003

Are Values Really Valuable? Effect of "Values" on Clinical Decision Making Among Medical Students

Hamza Waqar Bhatti, Mehwish kaneez, Noman Ahmed Chaudry, Syed Muhammad Jawad Zaidi, Shanzeh Khan, Shafaq Fatima Rawalpindi Medical Univeristy

Clinical decision making is a complex multifactorial process and important aspects such as clinical knowledge, reasoning, skills, and experience may affect it. The role of values in affecting clinical decision making among medical students is largely understudied. Our study aims to assess the role of values in clinical decision making

This qualitative study analyzed the data on 120 MBBS students from the third, fourth, and final year from Rawalpindi Medical University, Pakistan. The students were asked to rank eleven set of values from most important as rank 1 and the least important as rank 11. These values included authority, capability, pleasure, intellectual stimulation, critical thinking, equality, altruism, spirituality, tradition, professionalism, and safety. The mean rank of each value was calculated. Furthermore, students were given a set of four open-ended scenarios in which they were asked to evaluate which factors are important in clinical decision making. Students identified six factors in clinical decision-making and then group them into three categories: patient-centered, clinical and situational factors. The students who ranked equality higher considered patient safety less frequently than the students who placed equality at lower rank (p=0.032, Cohen's D=0.041) The students who ranked altruism higher considered their self-awareness less frequently than the students who placed altruism at lower rank (p=0.037, Cohen's D=0.902). Critical thinking and capability were given higher rank as compared to pleasure and spirituality.

Students prioritized critical thinking and capability while de-prioritized pleasure and spirituality. Therefore, incorporation of these values in undergraduate curriculum becomes an absolute necessity for an effective clinical decision making skills.



Professional ethics/Professionalism OP6C004

Students' Perception On Medical Ethics Learning from Two Faculty of Medicine in Jakarta

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UIN Syarif Hidayatullah Jakarta, Indonesia

Medical ethics is one of competencies that medical doctor' graduates should be accomplished. However, there is no consensus on standard of ethics learning for medical students. Many variations carried out by different medical faculties. This study aimed to identify the students' perception of medical ethics learning in 2 medical faculties.

This was a descriptive analysis study from questionnaires to final academic year students about medical ethics learning in the medical faculty of UIN Syarif Hidayatullah Jakarta (UIN) and Universitas Yarsi (UY). Total sampling was used with exclusion of students who had to join his juniors. Data was collected between November 2019 to May 2020 with total respondents of 212 people (83 UIN and 129 UY). Data was analyzed by SPSS 20 with chisquare analysis.

Ethics learning in both faculty of medicine were integrated within the module. However, about 75% UIN students said the medical ethics learning was done in each semester, while only 52% UY students agreed (p=0.014). 60% of UIN students were agree that there was always trigger case related to medical ethic, while 69% UY students were agreed (p=0.012). There was no disagree from UY students, while 5% of UIN students were disagree that they were competent to handle ethics problem (0.036).

Students have been undergone medical ethics learning differently. Self-evaluation of their medical ethics competencies was different. Minimal standard for medical ethics learning is needed to ensure standard quality of graduates.



Professional ethics/Professionalism OP6C005

The Effect of Teaching Professionalism by Using Real Lifetime Scenarios to Undergraduate Medical Students

Shazia Rasul
Shalamar Medical & Dental College, Lahore, Pakistan

The teaching of medical professionalism is utmost importance as the unprofessional behaviour during medical school effect the professional attitudes in practising physician. The objective of the research is to evaluate the effect teaching professionalism by using real lifetime scenarios in the form of movie clips & reflection to undergraduate medical students. This was a non randomised educational trial, conducted in OBGYN department of Shalamar Medical & Dental College, Lahore. The first two batches of final students who were attending the clinical rotation in OBGYN were taken as "control", however the third batch was labelled as "intervention " group. The professionalism was taught to intervention group in the form of two session of two hours duration each, at weekly interval. The students of both group were assessed one the start and end of OBGYN rotation for professionalism by using P-MEX and comparison done by t test. the two assessor were not facilitator.

Comparison of domains of professionalism including doctor patient relationships, reflective skills, time management, inter professional skills by using P-MEX between the intervention and control group showed the P-MEX score were below the expectation in the start of rotation, however the score raised to "met expectation" in intervention group at the end of rotation and remained "below expectations" in control group.

The teaching of professionalism by using real lifetime scenarios in the form of movie clips followed by reflection and interactive discussions proved to be effective methodology by this research.



Professional ethics/Professionalism OP6C006

Development and Validation of Professionalism Assessment Tool (PATS)For Medical Students

Humaira Fayyaz Khan, Raheela Yasmeen, Shabana Ali, Tahira Sadiq Riphah University

Professionalism has become a specific requirement for medical graduates and should be assessed by using a valid and reliable instrument. Objective of study was to develop and validate a tool to assess

This mixed method study had a preliminary focus group discussion for the development of the instrument. It was validated through a modified Delphi method with three iterative rounds. Relevance of each item, content validity ratio, content validity index average and universal agreement were calculated after these rounds. Cognitive pretesting was performed. Cronbach's Alpha for reliability and Confirmatory factor analysis were carried out.

The focus group produced 46 micro-scenarios. The first Delphi round generated 35 items. For second round Content validity ratio was calculated:11 items were retained, 16 were revised and 8 were removed and 27 items remained. For 3rd round S-CVI/Ave and S-CVI/UA were calculated which were 0.94 and 0.64. Pre-cognitive testing resulted in rephrasing of 5,modification of 2 and 1 was deleted. The Confirmatory factor analysis was 4.1. Cronbach's Alpha was 0.96.

The developed tool has a 27 item 5-point Likert scale with good content validity, reliability and acceptable construct validity



Professional ethics/Professionalism OP6C007

Perception of Professionalism of Medical Undergraduate Students Among Different Class

Indah Puspasari Kiay Demak, Ria Sulistiana, Andrew, Sindi Safira Tadulako University, Indonesia

Professionalism plays a vital role in creating a competent doctor. A doctor needs to be competent in knowledge, skills, and also have to be professional. The aim of this study is to know the differences of perception of professionalism between undergraduate medical students among different class.

This was an analytical observational study with the cross-sectional approach. The subject was 565 undergraduate medical students of Tadulako University. Respondents were completed an online questionnaire about the perspective of professionalism, which comprises 30 questions. The questionnaire was developed based on CanMEDS professional attributes consisting of four categories: commitment to self, patients, profession, and society. Data were analyzed by the comparative Kruskal-Wallis test.

There was no significant difference in the perception of professionalism between first, second, and third-year students (p-value> 0.05) in all categories in preclinical students. First-year students have a higher perception than second and third-year students. In clinical students, there was a significant difference in the perception of professionalism between first, second, and third-year students (p-value <0.05) in all categories. Perceptions of professionalism increase along with the grades.

The trend of preclinical and clinical students' perceptions of professionalism is the opposite. Initial perceptions and the academic environment greatly influence the perceptions formed.



Professional ethics/Professionalism OP6C008

Measuring Professionalism Through Conscientiousness

Marina Sawdon, John C McLachlan University of Sunderland

Measuring professionalism objectively and quantitatively is a significant challenge in medical education. We have previously demonstrated that calculation of a Conscientiousness Index is a valuable predictor of undergraduate performance and here we extend that into the postgraduate arena.

Data were collected between 2005-2018 as part of the Conscientiousness Index (CI) project. The CI scores represent the predictor variable for this study. Outcome variables data were obtained from the UK Medical Education Database (UKMED) on 858 students. The measured outcomes were scores on the UK Foundation Programme Office's Situational Judgement Test (SJT) and Educational Performance Measure (EPM), the Prescribing Safety Assessment (PSA), and Annual Review of Competency Progression (ARCP) outcomes. This outcome data allows us to assess any predictive validity of the CI for future performance as a doctor.

Linear regression analysis shows Conscientiousness Index scores significantly correlate with pre- and postgraduate performance variables,: SJT scores (R=0.373, R2=0.139, B=0.066, p<0.001, n=539); PSA scores (R=0.249, R2=0.062, B=0.343, p<0.001, n=462); EPM decile scores for the 1st (lowest) decile are significantly lower than the remaining 90% (P=0.003, n=539), as are PSA scores (p<0.001, n=463), and ARCP Year 2 scores (p=0.019, n=517). The Odds Ratio that students in the 1st decile fail to achieve the optimum ARCP outcome is 1.6126 (CI 1.1400 to 2.2809, p=0.0069, n=618).

Early medical student Conscientiousness is a valuable predictor of later performance in the clinical environment and offers an objective, quantitative metric that can be employed from the earliest career stages.



Professional ethics/Professionalism OP6C009

Perception of Educational Environment and Academic Performance among Medical Students

Mehwish Kaneez, Syed Muhammad Jawad Zaidi, Hamza Waqar Bhatti Rawalpindi Medical University

The study aims to assess their correlation and provide recommendations for a conducive educational environment (EE).

This was a cross-sectional study conducted in a public sector medical institute of Pakistan in which EE of 320 students from 2nd till 5th years was assessed using Dundee Ready Educational Environment Measure (DREEM).

The mean DREEM score was 98.32/200 indicating the perception to be on the less positive side. Students' academic self-perception (SASP) domain scored highest (16.97/32, 53%) while students' perception of teaching (SPT) domain scored the lowest (20.07/44, 45.5%). The difference in mean DREEM and subdomains scores across academic years were statistically significant (p<0.001) with 2nd-year having the lowest (86.4) and 4th year having the highest (110.22) mean scores. There was a significant positive correlation between academic performance and total DREEM score (r=0.661, p<0.01) The simple linear regression for predicting obtained scores in recent professional exams by total DREEM score was statistically significant (p<0.001).

Academic performance was strongly correlated with the perception of the educational environment. Improving the perception of the educational environment will lead to better academic performance. Interventions such as training of teaching faculty, promotion of research-oriented learning, and the establishment of a support system for stressed students will help the administration to provide a better educational environment and improve the academic performance of students.



Professional ethics/Professionalism OP6C010

Perceptions of Medical Teachers and Students About Constraints and Capacities in Distance Learning: Input for Faculty Development

Alidina Nur Afifah, Oktarina Universitas Muhammadiyah Jakarta, Indonesia

Since Covid-19 pandemic, distance learning is booming and requires adaptation from students, teachers, and faculty. Technical problems can be overcome by increasing the ability of teachers to manage a course and technology. Whilst, students need to modify their self-regulated learning ability. Those identifications are essential as inputs for faculty development.

This research was conducted using a cross-sectional survey of 42 medical teachers and 613 students of Faculty Medicine and Health, University Muhammadiyah Jakarta. The data used was secondary data taken from the Quality Assurance Unit in October 2020 using google form as a self-administered questionnaire with a Likert scale. The response rate were 92% teachers and 83% students. There were six variables studied in this research i.e. technical constraints of distance learning, teachers' perceptions of the important components in distance learning, student self-perceptions, teachers' and students' perceptions of web conference effectiveness. The last variables were teachers' self-perceptions and students' satisfaction. The top 5 technical constraints of distance learning complained were signal interference, internet data plan, limited e-literatures, and lack of communication with the faculty. According to the teachers, the important components were faculty commitment(90%), regulation(85%), technical-support(79%), course management and teaching-learning guidelines(77%). 83% of students experienced learning difficulties during distance learning. There were only 45% of students felt their own independent learning method is effective. Teachers and students agreed that web conferencing is ineffective for learning clinical skills, but they disagreed on cognitive knowledge. 74% of teachers stated that the presentation was interesting, meanwhile, more than 25% of students were dissatisfied.



Oral Presentation 10: Simulation based teaching/Reflection OP6D001

Anonymous Feedback: A Real-Time Feedback to Capture Students' Engagement in Learning Process

Abida Shaheen, Fahad Azam, Hania Naveed Shifa College of Medicine

Teachers' evaluation plays crucial role in learning process and curriculum delivery. Sometimes students feedback is not honest due to fear of being identified and anonymous feedback in unstructured format might be effective strategy. Aim of study was to compare quantitative and qualitative data through anonymous and standardized official evaluation system.

Medical students (110) of year III of Shifa College of Medicine participated during an integrated module. We created anonymous feedback portal on website www.freesuggestionbox.com, provided link and encouraged students to reflect on their learning process throughout the module and provide quantitative feedback on anonymous portal at the end of module. Students also provided structured feedback on standardized official evaluation questionnaire utilizing 21-items and optional comments as per routine. Quantitative and qualitative data of anonymous and structured feedback were analyzed. Broad themes were assigned codes, commonalities in both feedback were analyzed and any new areas highlighted by students were identified.

Eighty five comments were recorded on anonymous evaluation portal in comparison to twenty five optional comments on official questionnaire. Informative quality of data was similar in both feedback, however students provided more details about new learning strategies on anonymous portal. Quantitative evaluation obtained through both systems was statistically similar. Evaluation relevant to content delivery, module organization and formative assessments was provided immediately on anonymous portal. Standardized evaluation had only few comments on changes incorporated during the module which indicates that students might forget to reflect on instructional strategies.

Anonymous real time feedback may help faculty to immediately resolve highlighted problems, ensure active participation and reduce insecurities of students. Structured feedback might influence originality, promptness and specificity of comments.



Simulation based teaching/Reflection OP6D002

FKIK UAJ Students' Evaluation on Online Distance Learning

Kevin Kristian, Dr.dr. Felicia Kurniawan, M.Kes; dr. Yunisa Astiarani, MPH; dr. Bryany Titi Santi, M.Epid, Sp.DLP; dr. Laurentius Aswin Pramono, M.Epid, Sp.PD Atma Jaya Catholic University of Indonesia

School of Medicine of Atma Jaya Catholic University has been implementing a full online learning and teaching through all medical study programmes since the pandemic entered Indonesia. This study aims to evaluate the current distance learning programme which is implemented as a response to the Covid-19 pandemic.

This study was a cross-sectional study, carried out in the early June of 2020 in FKIK UAJ. We used a total sampling of 1,118 participants, consisting of preclinical, clinical, and pharmacy students of FKIK UAJ. We used Google form for collecting data about students' perception regarding advantages, limitations and future suggestions of online distance learning. In total, six hundred twenty-five (625) students had filled out the questionnaire. The data were analysed by using the STATA program vs 16. Data was analysed using univariate and bivariate analysis and the result was pictured based on each study programme.

Participants were predominantly clinical students and they mostly lived without their parents. In terms of advantages, "no need to worry about food as it has provided" were at the top rank of opinions reported, followed by "more time to study". For limitations of distance learning, participants argued that internet connection and difficulty to understand subjects were top two opinions found in the study. Participants suggested staff members to interactively provide lectures with video and case simulation and ensure that more organised learning schedules are being provided. For clinical students, in particular, lack of hands-on practice to patients is reported.

Despite the advantages and limitations, university staff members should be reassured to teach, via online distance learning, with the same quality as in direct face-to-face teaching quality.



Simulation based teaching/Reflection OP6D003

The Effects of Self-Reflection On Burnout Syndrome and Self-Esteem in Clinical Year Medical Students

Theera Chaiyabut, Natcha Aroonpairodjanakul, Thawat Parodom, Chanchai Charonpongsuntorn
Srinakharinwirot University

Reflection serves as a tool for self-assessment and self-improvement. Self reflection are applied in medical schools, hoping to improve self-portrayal and enhance performance. The purpose of this study is to investigate the impacts of self-reflection on burnout and self-esteem in clinical year medical students.

Pre-experimental study was done, in which clinical year medical students were selected using convenience sampling (n=122). The participants were asked to complete a set of questionnaires consisting of Rubin's Self Esteem Scale and Maslach Burnout Inventory (MBI). Participants with moderate to severe burnout symptoms were included in the experiment (n=6). These participants were asked to fill an online form comprised of a list of questions which help them reflect on their feelings and related experiences. One week after completion of the reflection form, they were asked to repeat the questionnaire test. Pre and post test scores were analyzed

Statistically Significant differences in increasing depersonalization and reducing personal accomplishment score after completing the reflection form (P = 0.045, 0.013 respectively). increasing emotional exhaustion was observed too. In contrast, self-esteem scale was improved after completing the reflection but the changes were not statistically significant. This could be due to the fact that self-evaluation reminded participants of some of their failures, but at the same time offer an opportunity for them to reflect on achievements.



Simulation based teaching/Reflection OP6D004

Clinical Entrepreneurship; A Demand Unmet in The Third World Medical Community

Rafia Minhas Avicenna medical and Dental College

The physicians practicing in the private sector struggle and complain that the training at their professional institutes has failed to teach the business aspects of medical profession. The aim of this study is to identify the competencies of clinical entrepreneurship for medical students. the literature search strategy has been devised according to the techniques and protocols laid down by the BEME guide 3. The broad area selected was entrepreneurship, and emphasis was on competencies. "Clinical entrepreneurship" is a relatively new concept and had less articles, hence articles from non-medical field were also included in the initial search. A systemic electronic database search was conducted using search-engine; Google Scholar and databases; such as PubMed, ERIC and Psych INFO. Different search terms; key words and synonyms were used to ensure the sensitivity of the results. PRISMA guidelines were used to ensure methodological rigor and quality.

clinical entrepreneurship denotes the process of opening a private practice. The literature does not identify any competency related to it. However, the researcher has contextualized this term by blending entrepreneurship competencies with practice management frame work. 60 competencies have been identified through extensive literature search.

This is the first study to identify the clinical entrepreneurship competencies for medical students. These competencies empower the medical graduate, and aid in becoming a better health professional.



Simulation based teaching/Reflection OP6D005

High-Fidelity Simulation for Respiratory System Clinical Examination Training for Medical Students: Pilot Study in A Lower-Middle-Income Country

Russell Seth Martins The Aga Khan University

Although high-fidelity simulation-based medical education (SBME) is a regular feature in the developed world, lower-middle-income countries like Pakistan have yet to explore this mode of teaching and learning. This pilot study assessed the effectiveness of high-fidelity SBME in teaching/learning respiratory clinical examination in medical students in Karachi, Pakistan. A quasi-experimental study was conducted amongst third year medical students of the Aga Khan University, Karachi, during their Family Medicine clerkship. Students were assigned to intervention or control groups. The intervention group (IG) underwent training for the respiratory system clinical examination on a high-fidelity simulator mannequin, while the control group (CG) received the conventional practice session on standardized patients. At the end-of-clerkship formative examination, students were assessed on their respiratory system clinical examination skills. Skills in 5 domains were assessed, and each domain was scored between 1-3 points (Poor=1, Fair=2, Good=3) for a maximum composite score /15. There were no statistically significant differences in demographics for the CG (n=41) and IG (n=40). On the formative exam, composite score for control and intervention groups was not significantly different (CG: 12.9 \pm 1.89 vs. IG: 11.9 \pm 2.35; p = 0.067). However, a greater percentage of CG students were rated Good in all 5 domains, with the difference being statistically significant for one of the measured domains i.e. Ability to Correlate Findings with Clinical History (CG: 87.8% vs IG: 67.5%; p = 0.028).

High-fidelity SBME may not significantly aid clinical skills learning, and its use in a resource-constrained lower-middle-income country like Pakistan is questionable and warrants further research.



Simulation based teaching/Reflection OP6D006

The Differences of Learning Achievement of Vein Puncture Between Using Mannequin Learning Objects and Real Patients

Linda Rosita, Mahdea Kasyiva, Ester Tri Rahayu Universitas Islam Indonesia

Linda Rosita^{1,*}

Background: Clinical competence is a mandatory requirement in medical education. The learning form of clinical competence is skills lab. This learning activity uses tools that resemble the actual conditions of the patient. This study aims to compare the performance based on students's perceptions of learning medical skills for venous puncture.

Method: This research is an observational-cross sectional study, with one time in collecting data, by filling out a questionnaire. The research subjects were young doctors who had undergone the clinical laboratory stage. The research location is partner educational hospital of Medical Faculty Islamic University of Indonesia (Regional Public Hospital of Kebumen and Yogyakarta Islamic Hospital). Respondents will fill out a questionnaire that can be accessed on line. Data analysis for the differences with the Independent T-Test.

Result: The independent T-Test analysis shows that p-value = 0.006 on clinical knowledge between using mannequin learning objects with real patients. These results indicate that students's perceptions of clinical knowledge of venous puncture using real patients are better than using mannequins. Meanwhile, there was no significant difference in the clinical skills of venous puncture between using mannequins and real patients, p value = 0.684.

Conclusion: There are differences in the achievement of clinical knowledge based on students's perceptions in learning venous puncture between using mannequin learning objects and real patients.



Simulation based teaching/Reflection OP6D007

The Use of Virtual Escape Rooms as an Alternative Teaching Strategy for Qi Principles in Medical Education

Selya Amrani, Philip Chkipov, Kheïra Jolin-Dahel University of Ottawa

Having a diverse medical school population enhances student preparedness to care for underserved communities, and increases patient satisfaction and access to care. Our purpose was to collect and report diversity data from across all Canadian medical schools, in order to promote transparency of Canadian medical school programs.

An online questionnaire surveyed the demographic, educational, and socio-economic backgrounds of the medical students at the University of Ottawa Faculty of Medicine, Canada. Survey data was collected from an online survey development cloud-based software "SurveyMonkey" which enabled the anonymous submission of information to ensure the protection of the privacy of our participants. Our study population consisted of all four matriculating cohorts (MD 2020 - MD 2023) of medical students in the undergraduate medical education program at the University of Ottawa Medical School, for a total of 655 students.

The response rate for the survey was 63.2%. A majority completed a 4 year degree (59.3%) and 79.7% had a GPA of 3.9-4.0. There was an under-representation of Black and Aboriginal students (2.9%, 2.5%). Only 8.4% of students reported financial barriers, with 55.2% having a household income of over CAD \$100,000. Respondents were diverse in immigrant (20.3%) and visible minority status (36.0%), and 24.2% reported overcoming social barriers. A majority of respondents (63.0%) expressed their desire to know more about the diversity of medical student population across all Canadian faculties at the time of their application to medicine.

The development of a National Student Diversity Database to Increase the transparency of diversity statistics in Canadian medical students could promote social accountability in medical education.



Simulation based teaching/Reflection OP6D008

How Do We Engage Students in Reflective Practice?

Sarah M Choi University Hospital of Wales

Background & Aims: Research has shown that feedback in medical education is important, enabling improvement and by enriching learning. There is little training given for clinicians on giving feedback in particular constructive or 'negative' feedback. My aim is to provide methods in giving effective constructive feedback.

Discussion: Feedback models can be used to help the trainer give feedback in a structured way. The feedback sandwich model and Pendleton's rules are explored and critiqued. It has also been suggested to address the learner's emotional reaction when provided with negative feedback, to enable a safe environment. Research promotes 'seeking feedback' behavior from learners to make feedback a part of learning culture. There should be a move away from using the term 'negative' feedback and instead 'constructive' feedback to create a new positive feedback culture.

Conclusion: Trainers could utilise feedback models whilst being aware of their limitations and draw backs. Learners should be educated on the importance of feedback to encourage 'seeking feedback' behavior to create a new learning culture. The trainer should use different models but with flexibility to enable a safe environment for the learner. The term 'negative' should be abolished and completely replaced with 'positive feedback' to promote a healthier feedback culture.

Recommendations: Models can be used. Need to educate learners on the importance of feedback. We should abolish the term 'negative' and always use 'constructive- to promote a healthier feedback culture.



Simulation based teaching/Reflection OP6D009

Reducing Barriers To Leadership And Management Opportunities For Junior Doctors

Clare Carasco, Han Wang, Orhan Orhan
Postgraduate Medical Education Department, Chelsea & Westminster Hospital

Leadership and management training has become a core component of almost all medical curricula. Despite this opportunities to develop these skills remain focused towards senior trainees, between 7 -11 years into training. Our aim was to identify barriers to junior trainee involvement and design a course to help overcome these.

Of 27 junior trainees surveyed at our hospital 82% had never been on a leadership and management course and 71% claimed to have no formal education provided within their training programme. Free text questions identified barriers to engagement, which we subsequently explored further. Trainees were asked to respond to all that applied. We found 77% of trainees felt courses were not advertised well, 15? It there was lack of availability due to oversubscription, 30% found their stage of training deemed them ineligible for courses, 37? It there was inability to get time off and 30? It courses were too costly.

Therefore we decided to create a leadership and management course at our hospital specifically for junior doctors within their first six years of training. The course was widely advertised to junior doctors; adequate warning given to ensure doctors were able to get time off and funding requested to enable free attendance. Topics covered included: NHS structure and strategy, finance, risk and governance, service improvement and opportunities available. Following the course there was an increase in those considering a leadership and management role in their future career from 39.3% to 66.7% and a 60% increase in understanding of further opportunities available.

In conclusion by creating a course designed specifically for a sub-group of junior doctors we reduced barriers to involvement and increased their understanding of management and leadership roles in medicine.



Simulation based teaching/Reflection OP6D010

Using A Ward Round Checklist and Simulation to Teach Junior Doctors and Medical Students Ward Round Skills

Grace Pearson, Sally Wege, Sarah Rosen University of Bristol

Newly qualified doctors are often required to facilitate an independent ward round from day one on the job, yet necessary ward round skills are not commonly included in undergraduate education.

A ward round checklist was developed for use on medical wards at the Royal United Hospital (RUH), Bath, UK. This was introduced to fourth-year University of Bristol medical students (N=8) and newly qualified Foundation Year 1 doctors (FY1s, N=34) in small-group simulation sessions. The simulation included three common ward round scenarios using authentic electronic and paper resources, such as drug charts and observation charts. Participants' confidence in documenting and leading a ward round was assessed before and after the teaching. This was self-rated on a scale of 0-10.

The simulation produced a statistically significant increase in self-rated confidence in all groups. FY1s' confidence documenting increased from 6.8 to 7.6/10 (p=0.007), and their confidence leading increased from 3.9 to 6.6/10 (p<0.001). Medical students' confidence documenting increased from 5.1 to 7.0/10 (p=0.003), and their confidence leading increased from 2.4 to 5.6/10 (p=0.002). As expected for their level of training, medical students' confidence in both domains was consistently lower than FY1s. In both groups, confidence documenting was consistently higher than confidence leading ward rounds. In feedback, participants reported the teaching to be 'useful' and 'engaging', rating it on average 4.9/5 stars.

We have shown that using a ward round checklist in tandem with simulation is an effective way of teaching junior doctors and medical students ward round skills.



Oral Presentation 11: Medical Education Research OP6E001

Level of Integration in Current Undergraduate Curricula of Two Private Sector Medical Colleges in Karachi

Naila Baig, Faiza Siddiqui, Iram Khursheed, Mirza Altamish Muhammad Baig, Khubaib

Muhammad

Ziauddin University

Background: To prepare tomorrow's doctors with a holistic view of medical problems and their solutions, the undergraduate medical curricula need to be aligned with evidence based practices. Objective: To investigate the level of integration in the undergraduate medical curricula of two private sector medical colleges in Karachi.

Method: This analytic cross-sectional study was conducted from September to November 2020. Using convenience sampling, basic-sciences and clinical faculty involved in undergraduate medical teaching, at two private sector medical colleges in Karachi, were the study participants (n=107). A self-designed questionnaire, based on discussion and Ronald Harden's Integration Ladder, was validated through a pilot study on 5 participants. After post-pilot changes, this questionnaire was self-administered for data collection, with 11 closed-ended questions on a 5-point Likert scale, generating Individual Integration Scores (IIS), and 6 open-ended questions for teachers' perception. Gender, age, experience, designation and discipline based differences in IIS were studied.

Results: The response rate was 53.5% (107/200). For a total Integration Score (IS) of 55 for 11 questions, the mean IS was 37.4 \pm 6.7. The median age (p=0.65) and teaching experience in years (p=0.140) had no statistically significant correlation with IS. No statistically significant difference found in IS of teachers of different genders (p=0.505) or academic designations (p=0.202). Participants teaching basic or clinical health sciences had statistically significant differences (p=0.004) in IS. Main perception themes reflected need for: active participation of senior clinical faculty in teaching undergraduates, even in initial years, involving lecturers in curriculum meetings, and integration of assessment.

Conclusion: The two institutes generally follow Temporal Coordination, with fluctuations through Harmonization-to-Complementary level. Recommendations: Large-scale integration evaluations are required. Issues and solutions highlighted by participants might help preparing future medical-science-workforce.



Medical Education Research OP6E002

Correlation of Problem-Based Learning Performance with Student's Grade On Written Course Exams

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Problem-Based Learning (PBL) with seven-jumps steps is widely applied in medical education. In our setting, facilitators assign a score to reflect students' discussion performance and written reports in small-group discussion sessions. This study aimed to determine the correlation between those PBL scores with their grade in two sequential course exams.

This retrospective study was analysed using the PBL record data from 214 first-year medical students and 20 different facilitators on Anatomy-Physiology topic PBL session of Basic Medical Science 2B Course at School of Medicine, Faculty of Medicine, Universitas Brawijaya, Indonesia. The Spearman correlation was conducted after pairing the facilitator score with midterm and final exams. PBL discussion assessment consisting of three-component (Dealing with Task, Dealing with Other and Dealing with Self) and one component of written task (students' individual handwriting on each PBL step). The course exam was carried out with a Moodle platform.

Exam reliability was assessed with Cronbach's alpha. The mean was 0.920±0.009. Moodle item analysis corresponded with the standard of Facility index to Discriminative efficiency. Students' PBLs' scores for discussion performance, an individual written task and the total PBL Score were positively correlated with their midterm and final course exam grades (p<0.0001, r=0.273, CI 0.140 to 0.396; p<0.0001, r=0.283, CI 0.151 to 0.406). However, the coefficients of determination showed that the correlation was not significant, since each PBL score component explained only 2% to 10% of each exam grade variance.

According to current results, we assumed that PBL is useful in positively influencing the exams grade. However, an improvement in PBL elements is essential to increase students' course competency.



Medical Education Research OP6E003

holders.

Glass Ceiling: How Do Pakistani Women in Medical Profession Experience It In Their Career Progression

Amina Nadeem, Rahila Yasmeen, Tahira Sadiq Riphah International University

'Glass ceiling' is an un-acknowledged barrier to advancement in a profession, especially affecting women. Muslim women face additional problems due to cultural factors. The purpose of the study is to explore the extent and factors leading to glass ceiling perception through sharing of experiences of women in medical profession.

This 'Narrative Inquiry Design' qualitative study will be carried out from Jan—Jun 2021 at Riphah University, Rawalpindi, Pakistan. Pakistani women; who are in early, mid and top leadership positions in civil public and private medical colleges of Rwp-ISD zone, Pakistan will be included after purposive sampling. The number of participants will be determined during data collection till saturation of themes. The written and informed consent will be obtained. The theoretical framework of the study will be 'Feminist Theory'.

A semi-structured questionnaire will be designed and administered followed by in-depth interviews. The qualitative transcribed data will be analyzed following the protocol. The qualitative data will be transcribed following the steps: Step I: Reading & re-reading the transcript and making notes, Step II: 'Coding/indexing' by identifying and labelling relevant words, repeated phrases, important statements, surprising phrases/statements. Step III: 'Creating categories/themes' by combining codes, Step IV: 'Labelling categories' and finding out if there is a hierarchy/connection among categories if any and description of that connection. Triangulation in data collection and analysis will be done as quality measures. The study will highlight the extent of 'Glass ceiling' perception leading to better awareness regarding obstacles faced by women leaders and need to address these issues by all stake-

Excellence in Health Profession Education; Through Globalization & Collaboration



Medical Education Research OP6E004

Correlation Between Stress Scores and Self-Directed Learning Readiness Scores in First Year Medical Students

Afridatul Luailiya Sultan Agung Islamic University

Background: Self directed learning readiness of first-year medical students in Asia is proven to be low. Self directed learning rediness is influenced by internal and external factors. Objective: To find out the correlation between levels of stress and self-directed learning readiness scores in first year medical students

Methods: The quantitative correlational study was conducted in March 2020 . The research sample was a first year active student of the Faculty of Medicine, Sultan Agung Islamic University Semarang. Data was collected using Depression, Anxiety, and Stress Scale (DASS) and Self Directed Learning Readiness Scale (SDLRS) to identify the levels of stress and self-directed learning readiness. Data was collected at one point of time and analysed using SPSS Results: Of the 208 students approached, 194(93,27%) filled in the questionnaire. Of them, 153 (78,9%) were females and 41 (21,1%) were males. Significant differences were found between levels of stress and self-directed learning readiness scores in first year medical students (p=0.002). There was a low negative correlation between stress and self-directed learning readiness scores in first year medical students (r = -0,206).

The lower stress level of students, the higher desire to have self directed learning.



Medical Education Research OP6E005

Medical Students' Perception of Live Lectures Compared to Video Lectures in Basic Sciences Medical Education

Maria Khan, Ali Bin Abdul Jabbar, Daniyal Ali Khan, Muhammad Abdullah Javed,
Muhammad Hassan Raza Raja, Kanza Muzaffar
Aga Khan University

Live lectures are commonly used in medical education, yet many students prefer video lectures instead. As different learning modalities affect knowledge and examination scores, medical students' perspectives about these learning modalities required exploration. Hence, this study aimed to explore and compare medical students' perspectives regarding live lectures and video lectures.

This cross-sectional study used an online questionnaire. This was distributed to medical students, from 11 medical colleges across 7 cities in Pakistan, in their basic sciences years (years 1 to 3), via internet platforms after institutional approval. Data were analyzed using SPSS software (version 23, IBM, New York, NY, USA).

585 participants were enrolled, of which 64·4% were females, while 34·0% were males. Day scholars comprised 43·5% of participants, and hostel-residents, 56·4%. For each year, approximately 28% students maintained their attendance with difficulty. The commonest reason for live lectures absenteeism was 'poor teaching quality'. The commonest reason for attending was 'compulsory status'. 5.0% students reported live lectures, and 51.8% found video lectures 'very helpful' in clarifying concepts. Video lectures were the most popular modality for assessment preparation. 50.6% students wanted video lectures, and 28.5% wanted live lectures to be compulsory. Students mainly suggested against using slides in live lectures.

Medical students prefer video lectures over live lectures for learning. Video lectures can be explored as a feasible learning modality. Live lectures may be improved as suggested by students.



Medical Education Research OP6E006

Correlation Between Personal Integrity and Leadership Among Medical Studentse

Putu Asih Primatanti, Artha Budi Susila Duarsa, Irwan Syuhada University of Warmadewa, Indonesia

A medical student is hoped to be a leader for himself and to another health professional in the future. Integrity will boost the quality of honesty and strong moral values among leaders. This study aimed to examine the correlation between personal integrity and leadership among medical students.

A cross-sectional study was conducted at Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 241 were selected to participate in this study. The dependent variable was leadership and the independent variable was personal integrity. The data were obtained from the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) test. The data were analyzed using the Chi-square test.

Among 241 medical students at Al-Azhar Islamic University, Mataram, West Nusa Tenggara, 182 (75.52%) students had good leadership and 195 (80.91%) had good integrity. After the data from MMPI-2 were analyzed using Chi-square, it was found that leadership significantly correlated with integrity (p=0.010).

Leadership is correlated with integrity among medical students at Al-Azhar Islamic University. Medical students should improve their leadership so it can contribute positively to the person, faculty, and wider community.



Medical Education Research OP6E007

Relationship of Stress, Depression, And Anxiety with Learning Achievement in Medical Student During Online Learning

Ridha Fadhila, Budi Hernawan Muhammadiyah Surakarta University, Indonesia

Covid-19 requires universities to conduct online learning. It requires students to be independent, know new applications, and have a strong internet network. This causes stress, anxiety, and even depression in students, which affects their academic performance. To analyze the relationship between stress, depression, and anxiety with academic performance in UMS.

This study used a cross sectional study design and was conducted in November 2020. There were 151 respondents who participated in this study. The data collection of stress, depression, and anxiety scores was conducted using DASS 42 (Depression, Anxiety, Stress Scale 42) questionnaires and academic performance data using documentation of immunology, ENT (Ear Nose Throat), and psychiatry exam scores. The data were analyzed using Chi Square test and logistic regression.

The results of multivariate analysis of logistic regression for stress had values p = 0.023 and OR = 0.426, depression got the value p = 0.123 and OR = 0.542, and anxiety obtained the value p = 0.048 and OR = 0.475.

There is a positive correlation between stress and anxiety on academic performance.



Medical Education Research OP6E008

The Effects of Self-Reflection On Burnout Syndrome and Self-Esteem in Clinical Year Medical Students

Chanchai Charonpongsuntorn, Theera Chaiyabut, Natcha Aroonpairodjanakul, Thawat Parodom Srinakharinwirot University

Reflection serves as a tool for self-assessment and self-improvement. Self reflection are applied in medical schools, hoping to improve self-portrayal and enhance performance. The purpose of this study is to investigate the impacts of self-reflection on burnout and self-esteem in clinical year medical students.

Pre-experimental study was done, in which clinical year medical students were selected using convenience sampling (n=122). The participants were asked to complete a set of questionnaires consisting of Rubin's Self Esteem Scale and Maslach Burnout Inventory (MBI). Participants with moderate to severe burnout symptoms were included in the experiment (n=6). These participants were asked to fill an online form comprised of a list of questions which help them reflect on their feelings and related experiences. One week after completion of the reflection form, they were asked to repeat the questionnaire test. Pre and post test scores were analyzed

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Medical Education Research OP6E009

A National Survey Assessing the Provision, Quality and Accessibility of Surgical Skills Training in Uk Medical Schools

Isabel Summers, Keni S, Silvestre S, Clark-Stewart S and Poon M.
University of Edinburgh

Junior doctors must be competent in basic surgical skills. However, the availability of skills training is not well characterised across the UK. This study aimed to assess the provision, quality and accessibility of skills training available to UK medical students, and to identify ways in which these could be improved.

Two electronic surveys were created for UK undergraduate medical students and student surgical societies respectively. Medical students were asked about skills training opportunities and student surgical societies were questioned on the skills training they delivered. Medical student surveys were made available through social media platforms and societies were contacted directly. Questions covered surgical skills teaching structure, assessment, opportunity for skill practice and barriers to teaching provision and access. Responses were collected from April - November 2020 and analysed in SmartSurvey and Excel. Ethical approval was deemed unnecessary for this project as responses were anonymous.

185 medical students and 20 surgical societies responded. 35.1% of students had not received surgical skills training through their medical school curriculum. Few students had access to supervised (30.3%) or unsupervised (24.9%) practice of acquired skills. 80.0% lacked the opportunity to receive regular feedback or assessment of skills. 15.7% agreed that surgical skills teaching at their university was easily accessible. Students ranked the low skill session frequency and lack of opportunity for practice as the greatest barriers to accessing skills training. For societies, the high set up cost and difficulty sourcing equipment posed the greatest challenges for delivering skills training.

UK medical students lack access to regular surgical skills training, practice and assessment. This study highlighted gaps in provision and barriers to delivery, which will inform design of training programmes.



Medical Education Research OP6E010

Validation of The Can Meds Competence Framework for Workplace Learning In Undergraduate Healthcare Education: An Online Delphi Study

Janssens Oona Ghent University

Nowadays, workplace learning in healthcare education is often guided by competency-based educational methods. Various competence frameworks have been constructed but haven't been interdisciplinary validated in undergraduate healthcare education. This study aims to validate the CanMEDS competence framework in 8 undergraduate healthcare educational programs, and to provide recommendations.

A three round online Delphi method with experts i.e. teachers, mentors, internship coordinators and educational experts from audiology, dental hygiene, midwifery, nursing (bachelor and associate degree), occupational therapy, podiatry and speech therapy, was used. Experts scored the relevance, clarity and measurability of each key competency (n=27). Consensus was defined as 70% or more of the experts scored positive on a 6-point Likert scale (quantitative analysis). In round 1, experts also provided qualitative comments to clarify their score, adjust key competencies without consensus and formulate recommendations. Differences between expert groups (e.g. healthcare profession, experience level etc.) were explored after each round.

Round 1 and 2 included 38 and 37 experts. Round 3 is ongoing. After round 1, there was no consensus about the relevance of 2 competencies, the clarity of 3 competencies and the measurability of 19 competencies. Qualitative remarks were used to clarify (21) or adjust (3) competencies. After round 2, 3 competencies weren't validated. No significant differences between expert groups were found. The analysis further revealed that 1) key competencies needed enabling competencies to maximize measurability, and 2) not all key competencies could be assessed at any moment during the program which emphasizes the importance of continuous professional development.

This validated CanMEDS competence framework might be used to support interprofessional education across different undergraduate healthcare professions. Future research is necessary to validate newly formulated enabling competencies to optimize measurability.



Medical Education Research OP6E011

Where Does Affect Feature in Barriers to Learning Clinical Reasoning?

Sona Mistry, L.Collins, C.Warner, M.Singh University of Manchester

Clinical reasoning (CR) forms an essential component of clinical competence. Previous research at the University of Manchester has demonstrated that CR can be effectively treated as an entrustable professional activity, whilst highlighting significant challenges for students. Our aim is to identify student barriers to learning CR in a clinical environment.

We conducted 5 focus groups with second year clerkship students at the University of Manchester in the academic year 2018/2019. Students were asked semi-structured questions to explore the barriers faced in applying clinical reasoning skills whilst assessing patients in a clinical environment. Questions focused on learner, teacher and environmental factors. The focus groups were audio-recorded and transcribed. The data was independently analysed by 2 assessors. Thematic analysis of data was performed by applying the COM-B framework from behavioural science.

Barriers to CR were categorised under the following headings: Capability (physical and psychological), Opportunity (physical and social) and Motivation (reflective and automatic). We identified affective barriers to learning and applying CR skills that impact on all cognitive aspects of this skill. Nine affective barrier themes emerged, namely: 1) student perceptions of CR, 2) student confidence / uncertainty 3) feeling of burden, 4) student desire / initiative to learn 5) opportunities to practice CR 6) teacher attributes, 7) limited feedback, 8) patient attributes and 9) student-doctor relationships. These themes identify areas for improvement in current CR teaching in medical education.

We highlight the importance of learning CR as a contextualised process. We would like to develop our research into the impact of social, cultural and professional identity on developing CR.



Oral Presentation 12: Student Characteristics and Student Wellbeing OP7B001

Effect of Online Teaching in Reducing Stress and Anxiety Through Contextual Learning by Lms During Covid Pandemic

Shazia Ali, Raheela Yasmin, Shabana Ali, Humaira Fayyaz, Amena Rahim Islamic International Medical College

During online session Contextual teaching and learning strategy was used to reduce stress and anxiety in Riphah students, therefore, current study was done to determine and explore the factors that affect stress and anxiety of undergraduate students on exposure to LMS for e-learning.

Total 600 undergraduate students of Riphah University were included in this mixed method study which was conducted after the approval from Ethical Review committee. Quantitative survey was conducted by using GAD-7 and Perceived stress scale. The data was analyzed by using SPSS 21 for descriptive analysis of frequencies to find the students with high level of stress and anxiety. While Simple Qualitative exploratory study was done by simple random sampling of these students. Twelve online semi- structured one to one interviews of students through ZOOM. Data was analyzed manually and themes were generated by open coding in two cycles.

Students with high score at GAD-7 and Perceived stress scale had technostress. Qualitative interviews generated themes: SGDs are effective giving more chances to interact with teachers, question answer session with teachers and commencement of classes at specific time, it was a good experience in terms of following proper class schedule and not missing a bit of syllabus, it helps to understand how patient can present in practical life and why did he develop this problem, discussing different aspect of same topic with our peers enables to correlate clinically, question answer session with teachers and commencement of classes at specific time.

Technostress and anxiety developed in students of Riphah International University during online teaching and learning which was reduced by contextual teaching and learning strategy through Learning Management System (LMS).



Student Characteristics and Student Wellbeing OP7B002

Associated Factors in Level of Self-esteem in Thai Clinical-Year Medical Students

Chanchai Charonpongsuntorn, Thawat Parodom, Theera Chaiyabut, Natcha Aroonpairodjanakul Srinakharinwirot University

High level of self-esteem developing leadership skills, strong relationship to patient and health workers, advanced education and empathy. Building high self-esteem may help the medical education process. Clinical-years is the significant life change. The present study analyzed the impacts factors associated level of self-esteem in clinical-year medical students. A cross-sectional study was done, in which clinical-year medical students at Srinakharinwirot University were selected as study participants through convenience sampling (n=122). The participants were asked to complete a questionnaire of Rubin's self esteem and associated factors. Linear regression and multivariate analysis were used to identified factors and correlation.

All of the participates in this study has moderate level of self-esteem. Linear regression model revealed satisfaction in clinical year medical education, the thought of no leaving medical school, high frequency of exercise has statistically significant associated with high score of self esteem (P < 0.01, <0.01, 0.02 respectively). Multivariate analysis shown strongly factors to enhance self-esteem in clinical years medical student were satisfaction in clinical year medical education, the thought of no leaving medical school (P < 0.01).

The study established significant correlation between satisfaction in clinical year medical education, the thought of no leaving medical school with high level of self-esteem. Promoting may be improve self-esteem



Student Characteristics and Student Wellbeing OP7B003

Exploring The Relationship Between Medical Students' Temperament and Character Traits and Academic Performance

Simerska Pavla The University of Queensland

Certain personality traits have been found to correlate with academic performance in medical students. Whether temperament (heritable) and character (developmental) traits have specific effects on the type of performance is not known. This project investigated the relationship between the temperament and character traits and types of assessment across 4 years.

In 2016, first year medical domestic and international students (n=407) completed the Temperament and Character Inventory. An exploratory approach was adopted to examine every plausible relationship between assessment types and personality traits. Data management and latent class analyses were completed using R software. Correlational analyses were conducted to see any significant correlation between assessment types (written and practical) in 2016-2019 and personality traits (novelty seeking, harm avoidance, reward dependence, persistence, self-directedness, cooperativeness, self-transcendence). Personality traits and significant assessment types were then examined in the Multiple Factor Analyses.

Written assessments during years 1 and 2, were positively correlated with persistence, cooperativeness and self-directedness and contributed the most to students' academic performance. Self-directedness was the strongest factor across most cohorts. In contrast, novelty seeking, harm avoidance and self-transcendence were weakly correlated with assessment types across all students, especially international. Overall, personality traits correlated (weakly) with assessment types. Harm avoidance had the strongest negative affect across students and assessment type, while self-directedness, persistence and cooperativeness positively contributed to students' performance.

This analysis was useful in extracting the factors that may have an impact when considering personality and assessment. Further analysis will explore specific associations between traits and assessment type.



Student Characteristics and Student Wellbeing OP7B004

Factors Associated with Students' Scores in Online Learning Method in UIN Alauddin Makassar: A Cross-Sectional Study

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As a result of the Covid-19 pandemic, since March 2020, transformation to online learning is fully implemented at all educational levels, including medical students who also adopt this new normal learning method. This study aims to determine contributing factors associated with students' scores within online learning methods during this pandemic.

This study was conducted on 146 subjects in the Medical Faculty of Alauddin Islamic State University. Students' scores are classified into 3 learning methods (offline, blended, online) and were obtained from the academic portal. We also collected demographic data including social-economic status, student's entrance test, and student's origin from the student university platform. We assessed the association between demographic data and student's scores in 3 different learning methods.

Among 146 subjects, blended learning (78.55 ? 79.23) was the highest score compared to online (65.7 ? 10.2) and offline (70.25 ? 10.34) learning methods. Specific to online learning, students from district area was slightly tended to have low score compared to city students (p 0.05). The entrance test was associated with the score of blended and offline learning (p 0.02; p < 0.01) whereas online learning appears to be slightly significant (p 0.05). Social-economic factors have no association with students' scores in 3 different learning designs. In shifting to online learning during this pandemic, students' scores appear to be associated with student's origin and the entrance test.



Student Characteristics and Student Wellbeing OP7B005

Self-Perceived Competence and Learning Barriers of Medical Students in Family and Community Medicine Clerkship During Covid-19 Pandemic

Witri Pratiwi, Tissa Octavira, Ouve Rahadiani Permana Medical Faculty, Universitas Swadaya Gunung Jati, Indonesia

Medical studies during the COVID-19 pandemic faced several obstacles that may affect students' self-perceived competence. This study aims to determine students' self-perceived competence in family and community medicine clerkships and learning barriers faced during the COVID-19 pandemic.

A cross sectional study was conducted on medical students of Medical Faculty Universitas Swadaya Gunung Jati Indonesia who underwent family and community medicine clerkships during COVID-19 pandemic. Data were collected through a validated questionnaire to determine self-perceived competence in the area of competency: Managing health problems. The core competency was broken down into 6 competency components based on Indonesian Doctor Competency Standards (SKDI-2012). The questionnaire also contains questions about the most memorable activities and learning barriers faced by the students. There were 49 students who participated in this study, consisting of 28.6% male and 71.4?male. There were no students who have low self-perceived competence in all competency components. Several learning barriers were identified, whether related to COVID-19 or not. Internet connection is the main obstacle when learning online (63.3%). The limitation of health services (49%) and the risk of being infected with COVID-19 (44.4%) were the major learning barriers in public health services. Language differences (30.6%) and limited types of drugs at public health center (12.2%) were also faced by students.

Medical students in family and community medicine clerkship have moderate and high selfperceived competencies even though they face several learning barriers. However, actions are needed to minimize the learning barriers.



Student Characteristics and Student Wellbeing OP7B006

Burnout Syndrome and Associated factors in Clinical Year Medical Students

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Due to prolonged and inevitable exposure to stress at workplace, burnout syndrome has become a rising concern among health professionals. The aim of this study is to investigate the prevalence of burnout syndrome in medical students and explore associated factors.

A cross-sectional study was done, in which clinical year medical students at Srinakharinwirot University were selected as study participants through convenience sampling (n=122). The partcipants were asked to complete a questionnaire consisting of Maslach Burnout Inventory (MBI), which was translated into Thai, along with demographic information. The data was then analyzed using linear analysis and multivariate analysis.

The results from the sample group suggested the presence of burnout syndrome from high emotional exhaustion, high depersonalization and high personal accomplishment scores of 59.32%, 61.86%, and 86.44% respectively. The results suggested the presence of burnout syndrome from average emotional exhaustion, average depersonalization and average personal accomplishment scores of 34.75%, 34.75%, and 11.86% respectively. Several factors were found to have significant association with each subscale scores. Exercising three times a week and the thought of leaving medical school were correlated with emotional exhaustion (P-value 0.004, 0.001 respectively). Exercising three times a week was correlated with depersonalization (P-value 0.005).

The study established significant correlation between exercising three times a week and the thought of leaving medical school with different aspects of burnout syndrome.



Student Characteristics and Student Wellbeing OP7B007

Impact of Reflection-Based Whole-Batch Discussion On Enhancing Medical Students' Learning Proficiency in Malaysia

Uday Younis Hussein Abdullah, Marwan Saad Azzubaidi Universiti Sultan Zainal Abidin, Kuala Terengganu

Different approaches have been endeavored by medical educationists to produce high-standard graduates from medical school, including collaborative group discussions and reflective practice (RP) assignments. The aim of the current study was to evaluate the outcome of teacher-led whole batch discussion following RP tasks (RWD) given to the students.

One hundred twenty two medical students who attended the haematology course in University Sultan Zainal Abidin were recruited into this study over a period of 2 academic years. The first batch of students (n=61) were unexposed to the RWD intervention (RWD-unexposed) while the second batch from the following academic year (n=61) were exposed (RWD-exposed) to the intervention. Students adhered to the guidelines given by the instructor pertaining to the reflective practice (RP) prior to the sessions. Exam results from both RWD-exposed and the RWD-unexposed students were compared using student t-test. The mean scores of students' results were significantly higher among RWD-exposed students compared to RWD-unexposed students in their essay questions and objective structured practical exam questions (P<0.01). However, RWD-exposed students scored significantly lower than the RWD-unexposed students group in multiple true and false (MTF) questions. Implementing RWD is a promising teaching strategy in improving academic achievement of medical students especially in answering essay questions.



Student Characteristics and Student Wellbeing OP7B008

Impact of Digital Transformation On Student's Well-Being and Challenges Faced in Covid Era: Students Perspectives

Isra Khan, Rahila Yasmeen Ayub Medical College

To explore the experiences of students from different institutions & specialties world over during COVID era about challenges they faced in their teaching, learning and strategies they apply to cope it

Exploratory Qualitative analysis of students talks was done by transcribing the audio recording and themes were identified about challenges & coping strategies. Total 13 students from all over the world share their experiences through their talks in an online symposium on different topics and 03 more students participated in group discussion.

Challenges students faced were from online teaching, assessment, stress, anxiety, use of LMS for online assessment, open book exam, financing crises and survival, loneliness without family members, closing of borders for international students, role of institutions in building students support system, role of teachers as a mentor and counselor, internet connectivity and lack of skill attainment including clinical trainings.

In COVID crisis by understanding the student's perspectives can help the educational institutions in designing of online courses and devise the strategies to cope the challenges.



Student Characteristics and Student Wellbeing OP7B009

Exploring The College Adjustment's Process of Generation Z in Their First-year of Medical School

Rahma Tsania Zhuhra Universitas Indonesia

The first year gen Z medical students need to adjust with school life. The unique characteristics of gen Z could influence their adjustment process. This study explores the first year gen Z medical students' college adjustment process and its contributing factors.

We held a qualitative study with phenomenological approach was held in January-May 2020. The participants were selected from the first-year medical students of Faculty of Medicine, Universitas Andalas, Indonesia. Maximum variation sampling of the year of births, sex, hometowns, parents' occupations, and cumulative GPA score was applied. Primary data were collected with seven focus group discussions, and triangulation was done by six in-depth interviews with lecturers and documents study. Data were analyzed thematically.

Thematic analysis revealed three main themes: domain, processes, and contributing factors of college adjustment. The domain was an academic, social, and personal-emotional. The adjustment process encompasses the transition, transition-transformation, and transformation phase. The factors consist of existing and supporting factors. The existing factors included characteristics, gen Z's unique traits, mental state, demographic profiles, prior educational experiences, and social supports. The supporting factors involve the application of learning technology, creative-reflective studies and hands-on learning, the needs of constructive feedback, improvement of learning facilities, learning system and curriculum, teaching methods, and students' well-being.

College adjustment of first-year gen Z medical students is a complex process, multifactorial, and happened in various domains. Further research in multiple settings is needed to establish the well-receiving suggestions



Student Characteristics and Student Wellbeing OP7B010

What Motivates Junior Doctors to Teach?

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Teaching contributes towards Good Medical Practice and is crucial to progression in most training programs in the UK. While junior doctors form a significant teaching workforce, little is known regarding what drives them. This study explores motivational factors influencing Senior House Officer (SHO) doctors' decision to engage with

SHOs volunteered for semi-structured interviews which were audio-recorded. 9 SHOs participated. Interviews were transcribed, coded, and underwent thematic analysis. Results were analyzed within the context of 'Self Determination Theory' (SDT), a well-recognized model of motivation.

Major themes included "Intrinsic motivation", "Secondary goals", "External reasons", teaching as "Integral to the profession", and "Experience as a learner". "Intrinsic motivation" was the most frequently cited, although analysis revealed that "career progression" and "mandatory teaching" were the commonest sub-themes. Negative motivation resulted from "Environmental factors" (lack of time), "Personal Factors" (lacking confidence), and "Learner Factors" (disengaged learners). Pursuing a deeper interest in teaching was most likely to result from intrinsic motivation, interest in academia, and for career progression. Barriers towards developing deeper engagement included poor confidence, poor exposure to education, and funding.

Intrinsic motivation is high among UK SHO doctors, but is undermined by mandatory requirements for teaching on a local and national training level.



Oral Presentation 13: Teaching & learning-1 OP7C001

Video Based Assignment for Skill Development in Physical Therapy Learners

Sumaiyah Obaid , Hadia Nadeem, Mirza Obaid Bag Riphah International University, Islamabad

Video use meets the needs of the current digital generation of students and during the COVID-19 social distancing mandatory. Online learning to teach video based task to develop the hands on skill and attitude in learners. To determine the video based task to learn the hands-on techniques in undergraduate DPT.

A descriptive survey was conduct in May to October 2020, final year student of physical therapy with the knowledge of clinical rotation in their prior semester. A class activity was done to show the video related to the physical therapy skill and learner tabulate it with time duration, therapist positioning, patient positioning and hands on performance. After the discussion for understanding the skill learner n develop the video related to aerobic capacity assessment competency all the ethical and video development aspects informed to the learner. After the task the feedback evaluation was conducted.

All student develops the video with their camera from their cell phones and the simulated patients were there family members. The response of the learner indicates the interesting task to understand the aerobic capacity assessment. Learner's response shows that for developing video planning required to convey the concept clearly to understand and duration management required as well. Six question self-developed related to open and close ended questions.

The video based task helpful for active learning and in restrictions of hands-on practices during the pandemic situation educators needed to plan in future as well.



Teaching & learning-1 OP7C002

Has The "Glass Ceiling' Got a Color in Medicine? - Ethnic Minorities and Medical Career Choices

M Jama, M. Okocha
Doncaster & Bassetlaw University Teaching Hospitals

We aimed to investigate if ethnicity influenced career decision in young doctors and medical students in the UK. Furthermore, we aimed to investigate if mentorship and experienced racism further influenced these choices.

We distributed a questionnaire via social media platforms and several associations aimed at ethnic minority doctors and students. This consisted out of 10 6-point Likert scale statements regarding career choices, mentorship and experiences.

152 responses were collected; over 80% experienced racism from patients, while 65? They were not given the same opportunities for career progression. 28% stated their ethnicity influenced their specialty choice. 52% of respondents were influenced by having/lacking role models from an ethnic minority background, while 92% stated they would appreciate mentorship in their desired specialties.

Ethnicity and experiences of racism have a strong influence in choosing certain specialties and locations. Mentorship and increased awareness of these issues is necessary to achieve diversity in all specialties.



Teaching & learning-1 OP7C003

Graduates from Different Medical Schools Vary in Their Performance In The Mrcs

Ricky Ellis, Duncan SG Scrimgeour, Jennifer A Cleland, Amanda J Lee, Peter A Brennan Institution of Applied Health Sciences

UK medical schools vary in their curricula and pedagogy, however; little is known of the impact this has on performance in postgraduate examinations. We explored differences in Membership of the Royal College of Surgeons (MRCS) examination outcomes between medical schools, course types, national ranking and candidate sociodemographic factors. A retrospective longitudinal study of all UK medical graduates who attempted MRCS Part A (n=9730) and MRCS Part B (n=4645) between 2007 and 2017, utilising the UK Medical Education Database (https://www.ukmed.ac.uk). We examined the relationship between medical school and success at first attempt of the MRCS using univariate analysis. Logistic regression modelling was used to identify independent predictors of MRCS success. MRCS pass rates differed significantly between medical schools (P<0.001). Russell Group graduates were more likely to pass MRCS Part A (Odds Ratio (OR) 1.79 [95% Confidence Interval (CI) 1.56-2.05]) and Part B (OR 1.24 [1.03-1.49])). Trainees from Standard-Entry 5year programmes were more likely to pass MRCS at first attempt compared to those from extended (Gateway) courses, Part A OR 3.72 [2.69-5.15]; Part B (OR 1.67 [1.02-2.76]. Nongraduates entering medical school were more likely to pass Part A (OR 1.40 [1.19-1.64]) and Part B (OR 1.66 [1.24-2.24]) than graduate-entrants.

Medical school, course type and socio-demographic factors are associated with success on the MRCS. This prompts discussion as to whether or not variation between schools should be valued or reassessed.



Teaching & learning-1 OP7C004

Stimulating Critical Thinking Skills Through Critical Thinking Question List (CTQL)

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Critical thinking are essential skills needed by a physician. One of the ways to learn these skills is using a critical thinking question list (CTQL). This study was aimed to evaluate the effect of CTQL in stimulating students' critical thinking skill in the tutorial Problem-Based Learning (PBL)

This study was a cross-sectional study using a mixed-method approach. The subject is first year students who took the first course (n=177). Quantitative data was collected through the score of critical thinking (CT) examination and tutorial performance, while the qualitative data was collected using an open questionnaire. CT score consisted of students' work in applying CTQL based on a reading text. It includes two parts (creating question and answering it based on a reading text). Students had applied CTQL method during the first course. Quantitative data was then analyzed using Spearman correlation and the qualitative data was analyzed thematically.

Tutorial performance correlated significantly with the total CT score (p< 0.05), and it also had a significant correlation with the CT score part2 (p<0.05). However, CT part 1 did not have a significant correlation with the students 'tutorial performance. The qualitative data indicated that CTQL supported students' critical thinking activities during tutorial such as: criticizing others' opinion, selecting appropriate learning resources, asking more various questions, explaining using own word, and thinking comprehensively.

Critical thinking questions list could be an alternative method to teach critical thinking skills. It could be conducted by stimulating students to create questions and then answer it.



Teaching & learning-1 OP7C005

Online Teaching Self-Efficacy of Physical Therapy Faculty in The Wake of Covid-19 Pandemic

Saira Jahan Riphah College of Rehabilitation & Allied Health Sciences

One attribute that is essential for success in online education is self-efficacy. Self-efficacy is a cognitive characteristic associated with persistence and motivation in overcoming challenges. Perceived self-efficacy represents the confidence to achieve success. Objective: To determine the level of online teaching self-efficacy of physiotherapy faculty.

This study used a descriptive cross-sectional survey design. A web survey was distributed via Google forms link to all physical therapy educators teaching online courses during pandemic. Self-efficacy for online teaching was measured by the Michigan Nurse Educator's Sense of Efficacy for Online teaching instrument. The 32-item MNESEOT scale asked participants to respond to items using a Likert-scale format ranging from nothing (1) to a great deal (9) in relationship to questions about online teaching. Mean subscale scores for each respondent were calculated in the domains of instructional strategies, classroom management, student engagement, and computer skills.

Descriptive statistics were used to analyze demographic variables, including means, standard deviations, and frequencies. Independent t test was used to determine differences in the means of outcome variables based on specific grouping of variables, and Pearson correlations were used to determine the relationship between scale components. Of the 55 participants, the average age of faculty was 31 years, with ages ranging from 26 to 42 years. 92% percent of faculty members were female. Faculty had an average of 6 years of overall teaching experience (range, 1-15years). High online teaching efficacy scores correlated positively with mastery and preparatory experiences

Participants had high levels of online teaching self-efficacy. Additional research designed to improve self-efficacy in online learning are worth allocation of time and resources as they lead to student success.



Teaching & learning-1 OP7C006

Project Based learning (PjBL) As a Pedagogy of soft skills development in online learning environment

Saira Waqqar Riphah International University

Globally, employers are considering the graduates equipped with soft skills. Due to COVID-19 pandemic, education system shifted from traditional to online that is challenge for development of soft skills among students. The study purpose to determine the effect of project based learning for soft skills development through online learning environment.

A project based learning approach was used in an online course of Rehab education, ethics and documentation to develop the soft skills. 1st semester Master of Physical therapy students from six disciplines were selected. At the end of 1st module, a 4-week online group based project was assigned and assessed. Upon completion of research project, students' response was collected via online questionnaire regarding soft skill development i.e. Project management, Team work, Problem Solution, Interpersonal & Communication Skills. Open ended questions were used to identify strategies found effective for soft skills development during project. Data was analyzed through SPSS V21.

Total 82.4% students shared to what extent Project based learning equipped them with soft skills. After experienced PjBL 93.2% students learned active listening and 95.5? knowledged the successful outcome of project is based on team work .Total 91% enabled to identify and share the project relevant materials with peers. A 75.3% enabled to prepare project report on the basis of findings. Finally, 87.6% agreed with exchange ideas for problem solutions regarding project. Soft skills developed i.e. Team work, project management, problem solution and communication. The strategies were found effective i.e. Time bound task division, online group discussion, feedback.

It is concluded, the project base learning found effective in online learning environment to the development of soft skills. Which apparently will fulfill the needs of the 21st century employers.



Teaching & learning-1 OP7C007

Adaptation of Online Assessment System by Physical Therapy Students During Covid 19

Sumaiyah Obaid, Mirza Obaid Bag Riphah International University, Islamabad

During the COVID-19 the educational E-learning leads to educate and online assessment especially web-based assessment systems. The aim of the study to evaluate the online assessment by using the learning management system in physical therapy (DPT) students during COVID-19.

A cross-sectional study, where a sample of physical therapy students that used and were accustomed to an online assessment system were asked to fill in a short questionnaire and evaluate its use. The assessment system available on a web application that is hosted and runs on the University servers. All senior semester student included in this study, students had a small MCQ test to aware for the online examination. Each student asks to fill in a questionnaire containing 7 items with closed ended questions.

The questionnaire items responses show physical therapy students adaptation for online assessment, as opposed to other assessment forms, like oral examination or classical pen and paper examination. Also it shows physical therapy student preference to the online assessment as compare to the traditional examination. Data analyze through SPSS version 21. The analysis includes descriptive statistics elements, such as frequencies, and chi-squared tests. Every performed test used a 0.05 significance level.

The study shows that during the COVID-19 physical therapy student adaptation of online system for knowledge evaluation is acceptable and more objective.



Teaching & learning-1 OP7C008

A Bumpy Road to Online Teaching: Impact of Covd-19 On Medical Education

Anbreen Aziz Army Medical College

With sudden onset of online teaching after lockdown, this study aims to explore how COVID-19 has impacted medical education in Pakistan.

A survey-based research with open versus closed questions format was conducted from April-May 2020. Respondents were medical teachers from private and public sector medical and dental colleges of Pakistan. An adequate and representative sample was intended therefore data were collected until relevance of the participants, time and data saturation were reached. Closed-ended questions employed descriptive statistics. Whereas qualitative data was thematically analyzed by all authors independently to ensure analytical triangulation.

Responses from one hundred and twenty-five medical teachers highlighted an impact on the stakeholders, assessments and educational environment. The transition from face-to-face to online teaching went hasty and haphazard therefore, stakeholders found difficulty in adapting. Factors such as rudimentary system, inefficient internet, lack of previous experience further accelerated the situation. It was difficult to teach Anatomy and clinical skills online. Teachers were not satisfied and preferred actual classrooms. Students were non-serious owing to didactic lectures with no interaction. There was uncertainty about online assessments. The climate was too robotic without emotions, eye contact and physical presence.

This study has revealed institutional unpreparedness regarding stakeholder's training with online modalities. We need to train stakeholders to let them cope well with the present situation.



Teaching & learning-1 OP7C009

Perception of Medical Undergraduates Towards Student Led Seminar-An Effective Methodology for Small Group Teaching and Formative Assessment

Fareesa Waqar Riphah International University

Objective: To introduce interactive learning session like student-led seminar and to explore students' views towards different aspects of this method of teaching as well as formative assessment. This study was conducted at Gynecology and Obstetrics department, PRH, IIMCT, Rwp from January 2019- 2020. Study design: Quasi experimental

The study included 118 students from final year MBBS of IIMCT students in year 2019-2020. After taking written consent, they were divided into 9 batches of 13 students each. The students were assigned a topic for seminar presentation two weeks prior for preparation. All students gave presentations during their clerkship rotation in Gynae/Obs department. Students were evaluated on the basis of their knowledge content and their presentation skills. The marks were included in their formative assessment scores. Verbal feedback was provided to the students at the end of each session by the facilitator. Student feedback forms were evaluated by 5-Likert's Scale.

118 Final year undergraduate students participated in the seminar during their clerkship rotation in Gynaecology and obstetrics department. Out of 118 students participated, 102 students (86.44%) agreed that it stimulated their learning process.96(81.35%) students agreed that because of prior preparation, discussions were broader and in depth.108(91.52%) students agreed that seminar improved their communication skills. Feedback helped a lot to improve knowledge and skills. Being assessed drove them to learn and do maximum preparation.91 students agreed that student led seminar stimulated them to think critically about the topic. 11students suggested to conduct these students led seminars on regular basis

Student-Led Seminar technique can be applied to any subject in undergraduate small group teaching and formative assessment. It emphasizes deep thinking and has a greater influence on active learning.



Teaching & learning-1 OP7C010

Performance at Medical School Selection Correlates with Success in Part A of The Mrcs

Ricky Ellis, Peter A Brennan, Duncan SG Scrimgeour, Amanda J Lee, Jennifer A Cleland Institution of Applied Health Sciences

Medical schools in the UK use admissions tests to help select between similarly-qualified applicants for interview. In order to help justify their use, more information is needed about the predictive validity of these tests. Thus, we investigated the relationship between admissions test outcomes and success in the MRCS examination.

UKMED database was used to analyse A-Levels and medical school admissions test outcomes data for all UK graduates who attempted the MRCS Part A written examination (n=9730) and Part B clinical examination (n=4645) between 2007 and 2017. Univariate analysis and Pearson correlation coefficients examined the relationship between test scores and first attempt MRCS success. Logistic regression models were constructed to identify independent (demographic) predictors of MRCS success.

Successful MRCS Part A candidates scored higher in A-Levels, UCAT, BMAT and GAMSAT (p<0 r=0.32, r=0.35, xss=removed r=0.25,>0.05).

UK medical school admissions test scores positively correlate with performance at MRCS Part A, adding to evidence of their predictive validity.



Teaching & learning-1 OP7C011

Assessing Cultural Sensitivity Questions in Ranking Decisions for A Family Medicine Residency Program

Lori Schramm University of Saskatchewan

The ability of family physicians to establish an inclusive and culturally-safe practice environment is a key competency of the profession. Our study aimed to explore the utility of questions assessing for cultural sensitivity to improve ranking decisions of family medicine residency candidates.

A series of cross-sectional online surveys were sent to interviewers, site directors and administrators, following completion of the first period of national resident interview dates. The surveys contained both closed and open-ended questions about the utility of cultural sensitivity questions during the interview process. Frequency distributions were calculated in Microsoft Excel for the 5-point Likert items. Open-ended data was themed by an independent researcher. This project was exempted by the Behavioural Research Ethics Board of the University of Saskatchewan.

The majority of respondents felt the questions helped them identify candidates that would fit the program. Local modifications were done to adapt to local context or improve clarity. For example, questions were generalized to vulnerable populations or narrowed specifically to experiences with Indigenous populations. Some participants indicated that cultural knowledge, as opposed to empathy, can be taught and thus the latter is what the assessment of candidates' abilities should focus on. It was also suggested that these questions detract from opportunities to assess "particularly relevant clinical experiences or personal experiences outside of medicine."

Interviewers generally felt cultural sensitivity questions improved ranking decisions. Additionally, allowing flexibility to adapt to local contexts was important. Future initiatives can focus interviewer training on cultural sensitivity/safety approaches.



Oral Presentation 14: Teaching & learning-2 OP8B001

The Use of Structured Social Media for Students' Independent Study: Students' Experiences Before Covid-19 Outbreak

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Current technological developments stimulate every person to use technology in aspects of life including medical education. The use of social media can be done by each individual independently so that when used in the education process can stimulate the ability of students to learn independently

Methods: This study was an experimental study with a pretest-posttest control group design. The sample is 68 third-year students, 34 students for each group. The sampling method was simple random sampling. Subjects were given treatment in discussions via LINE to discuss cases and vignette questions for four weeks by following the rules.

From the results of the independent t-test, it was found that there was no difference in block test scores and the ability to study independently between the intervention and the control group with p = 0.085 and p = 0.374, respectively. Ten of the 36 students who participated in the intervention were asked to fill out a perception questionnaire of the given intervention. Eight students said this was a good learning experience, and two people said it was good enough. Six students were not confident to discuss through social media.

Social media in the learning process is recommended to be carried out on independent study. However, it is necessary to consider students' ability to discuss, searching, and filtering valid information.



Teaching & learning-2 OP8B002

Podcasts in Plastic Surgery, Why We Should Start Listening

Cameron Clarke, Rushabh Shah, Maleeha Mughal Guy's and St Thomas' NHS Foundation Trust

Podcasting as a media format continues to grow on a global scale, but despite health being one of the top podcasting genres, nearly a third of the medical community are unfamiliar with the term. In medical education, they are useful learning aids, particularly in keeping listeners up-to-date with latest research.

Although increasingly popular among some medical and surgical specialties, there is relatively little material aimed at the plastic and reconstructive surgeon. We reviewed the major podcasting services across different platforms for plastic surgery podcasts and identified those with an educational agenda. We reviewed their educational aims, volume of content as well as frequency of publication. As a major London unit we also wanted to see how UK plastic surgeons were represented in the podcasting community. Finally, we compared volume of plastic surgery podcasts to those of a general surgery background.

Regarding hosting services 'Spotify' was a clear leader with 61 podcasts, 'podcast addict' (top android host) having 48, 'google podcasts' 37, and 'apple podcasts' 14. Unfortunately, from an educational perspective the majority of these were largely cosmetic-based or promotional. We only identified seven education podcasts, the majority of which adopted a journal-club format. 2 were UK based. Total number of episodes varied from 2-151, with an average number of episodes per month, ranging from 0.4-2.65. Average episode lengths varied from 6-56 minutes with a mean of 30 minutes. Plastic surgery had 2.4 times fewer educational podcasts compared to general surgery.

With the need to adapt medical education as a result of the Covid-19 pandemic and increasing 'webinar-fatigue', the podcast may represent a versatile teaching medium in surgical education internationally.



Teaching & learning-2 OP8B003

Disclosure of Personal Information by Healthcare Professionals During A Consultation

Andries J Muller, Mitchell Canaday University of Saskatchewan

Previous studies have reported mixed results about patient satisfaction with disclosure of personal information by their physicians. Physicians often wonder how patients will react to disclosure of personal information. It was decided that a study about this would be beneficial to our cultural context in North America.

Seventy-five consultations at a Primary Health Centre were included in the study. Informed consent was obtained. Participants were told that the study revolved around communication skills and would be used to help teach future healthcare workers. The physicians were given pre-planned pieces of personal information to disclose, relating to health concerns that were anticipated. Sensitive topics such as mental and genitourinary issues were excluded, as were patients under the age of 18. The participants were given a questionnaire afterwards for their perspective on the disclosure of personal information. They were then debriefed about the purpose and methodology of the study.

The results of the study were overwhelmingly positive. None of the participants felt that the disclosure of personal information was inappropriate. Many of the participants did believe that disclosure of personal information by their physician was appropriate only in certain situations and if the physician does not cross boundaries. Themes that emerged included: Patients felt more at ease / comfortable after physician disclosed personal information, Patients felt physicians understood and could relate to their problems better after disclosure of personal information, Self-disclosure by physicians brought a human element to the consultations and Self-disclosure builds trust and enhances patient-physician relationships. Disclosure of personal information by a physician to their patients has a positive effect. The recommendation is that physicians disclose personal information to their patients in a professional way.



Teaching & learning-2 OP8B004

Utilization of Self- Directed Learning Sessions By Medical Students To Achieve Their Learning Goals

Shabana Ali, Raheela Yasmeen, Elishba Islamic International Medical College

SDL is a most essential skill that medical graduates need to acquire as proper utilization of self-directed learning session reflects self-regulation skills in students and their motivation to learn more. Objective of study was to determine the use of SDL sessions by medical students for achieving learning goals.

A descriptive study about utilization of self -directed learning sessions was conducted at Islamic international medical college after ethical approval of study. An anonymous questionnaire with five-point Likert scale was filled by 200 male and female students of first and second-year MBBS. The questions included were about the achievement of learning objectives, preference between the group and independent study, use of library resources and involvement in non-academic activities. Frequency tables were created by using SPSS version 21.

The overall response rate was 100%. For utilization of SDL session to achieve learning objectives, 46.3 % and 43.5% students agreed upon utility of SDL for PBL and interactive lectures respectively while 30% students disagreed for lecture. 58% students believe in group discussion during self-study sessions while only 35% prefer to study independently. About 46.4 % of students utilize library resources once in a week during SDL sessions while 20% don't visit the library at all. 38.6 % of students believed SDL sessions can be utilized for nonacademic activities while 35% of students disagreed with it.

Although a good proportion of students utilizes SDL session but still a comparable number of students don't appreciate the value of SDL sessions to achieve their learning goals. A qualitative



Teaching & learning-2 OP8B005

Development of Digestive System Video for Learning Anatomy in The Pandemic Era

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The coronavirus disease 2019 pandemic has had a tremendous effect on medical education including anatomy. In pandemic conditions, students cannot study with cadavers which have been known as "gold standard" for anatomy learning. This research objective is to develop anatomy videos as an alternative media in learning anatomy

We utilize a consumer video camera to record anatomy educational videos in a laboratory setting using plastinated specimens. The process of creating video content includes storyline creation, preparations of anatomy specimens of the digestive system, setting anatomy laboratory room, video recording, editing of video, and publishing videos on Youtube Channel. The channel links are shared to our students' college so they can access the video anytime and anywhere

The results show that these videos are appropriate materials for alternatives educational media in learning anatomy in the pandemic era although there some weaknesses found in this video. Students have more time and more flexible in learning the anatomy of the digestive system

Anatomy video of digestive system help students for learning anatomy in the pandemic era



Teaching & learning-2 OP8B006

Online Teaching In The Era Of Covid 19: Comparison Between Power-Point Vs Video Tutorial: Student's Perception

Fareesa Waqar, Beenish Khurram, Wajiha Shadab Riphah International University

Background: Medical education faced a major disruption due to COVID-19 pandemic in 2020. Increasing number of infected cases restricted the medical students from attending hospitals, thus shifting to online teaching. Objective: To compare students' perception towards use of video tutorial versus conventional power point presentation for online medical teaching.

: The online study was conducted at Gynae/Obs Department, IIMCT on Ms-Teams from 15April to 15 July 2020. Comparative descriptive survey was done.101 4rth year students participated. Students were taught a given topic on power point and then through a video tutorial online. Data was collected using a validated questionnaire. Students expressed their perceptions and attitudes towards online teaching techniques, using a 5-point likert scale. Data was analyzed on SPSS version 20. Descriptive statistics were used for demographic and students 'preferences. Means were calculated for two sets of data under the video tutorial and PowerPoint and test of significance checked

There were 34 males and 67 female students with ages between 22 to 26years. Mean scores of video tutorial were higher than mean scores of PowerPoint. There was statistical difference in content understandability, effectiveness of teaching technique and attitude towards two teaching techniques (P is < 0.05). Students had more positive attitude towards online video than PowerPoint as it was more entertaining ,engaging and effective. They were more satisfied with the online interaction with the instructor as well as peers in video tutorials. It was also found to be a better way to provide constructive feedback to students Online video tutorial was more effective than power point presentation in content understandability and teaching learning process. An intelligent use of teaching technologies is crucial in increasing students' achievements



Teaching & learning-2 OP8B007

Self-perception of Practical Skills in Medical Students And Its Correlation With Academic Performance: Are We Ready?

Syed Muhammad Jawad Zaidi, Mehwish Kaneez, Hamza Waqar Bhatti Rawalpindi Medical University

Students under or over-estimate their medical practical skills and its relation to academic performance in exams is still a grey area in medical education. This study aims to determine the confidence of performing practical skills in final year medical students and its correlation with academic performance.

It was a cross sectional study conducted from May 2020 to June 2020 which included 220 Final year MBBS students using a questionnaire. The questionnaire compromised of personal data of age, gender, marks in past four professional examinations, and confidence level rating scale of different medical practical skills. Data was analyzed sung SPSS v25.0. P-value < 0.05 was considered significant.

Students were most confident about measuring blood pressure and administrating IM injection (median score = 8). Least confident about immobilizing a patient, suturing a wound and interpretation of ECG, RTG, and differentiating heart sound. (Median score = 4 each). The total skill score correlated with the average marks of 4 professional examinations. (Spearman's ? =+0.448 P = 0.001) showing a moderate significant correlation between total skill score and total marks obtained in professional examinations.

Our study concludes that practical knowledge should not be neglected as it is as important as theoretical examinations. Curriculum changes along with supervised learning are required for more conducive environment



Teaching & learning-2 OP8B008

Response of Medical Schools in Africa to COVID-19: A Mixed-Methods Assessment of 33 Countries across the Continent

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Saint Paul Hospital Millennium Medical College in collaboration with University of Michigan Medical School

COVID-19 disrupted medical education across the globe. Currently, there is no comprehensive information about the impact of COVID-19 and related mitigation measures on medical education in Africa. Our study serves to fill this gap by examining the response of medical schools in 33 countries and student perceptions to these changes.

A 39-item survey composed of likert scale, dichotomous, and free response items was used to examine the impact of COVID-19 on medical education. The survey assessed domains of class structure changes and timing, patient interactions, exam administration, learning environment satisfaction, mental health impacts, and volunteer opportunities/engagement. This anonymous electronic survey was sent to medical schools across thirty-three African countries. Medical students were reached via an established social media network under the International Federation of Medical Students Association (IFMSA). Participants were from all years of medical school. Quantitative analysis was completed using R.

731 medical students responded with 694 (94.9%) students consenting to participate. The majority of students (87.6%) had their classes suspended, and from these, 217 (35.7%) of them had not resumed class at the time of the survey. Additionally, 364 (52.4%) of all students reported that the format of their classes changed in response to the pandemic. In general, before the pandemic 571 (82.3%) students felt they were in a supportive learning environment and after the pandemic 532 (76.7%) felt they were not in a supportive learning environment.

The majority of students surveyed had their education and learning environment disrupted due to the COVID-19 pandemic. This disruption may have important global public health implications in the future.



Teaching & learning-2 OP8B009

The Learning Effectiveness of Nurses Participating In A Simulated Management Of Fall Risk Factor Assessment

Chih-Ying Tu Tri Service General Hospital

The adequate survey and evaluation of risk factors in fall reasons were therefore crucial for the development of prevention and intervention strategies in inpatient care. To investigate the learning effectiveness of a simulated management of enhancing the perception of nurses' fall risk assessments and managements.

A total of 12 nurses at a hospital in one health system in northern Taiwan who had ever used the "fall risk factor assessment" tool to patients underwent neurosurgery were enrolled in this quasi-experimental study. A single group with the pre-test and post-test (6 weeks after intervention) approach was constructed. At our simulated model of fall risk factors assessment, we used strategies of teaching/practice on the simulated model. The outcomes were evaluated by the "questionnaire for fall risk factor assessment".

The within-subject effects indicated notable improvement of knowledge in the fall risk factors assessment by receiving our strategies of teaching/practice on the simulated model training. The mean scores in knowledge in fall risk factors assessment were 3.25 and 9.13 in pre-test and post-test scores respectively. We found a remarkable improvement in the post-test scores compared with the pre-test results in participators post our training strategies. We recommended incorporating the simulated system with teaching/practice into clinical nursing education and training strategies to archive a better training course.



Teaching & learning-2 OP8B010

Be A Nurse with Career Choice Motivation

Uly Pramuditya Isnaini, Winny Setyonugroho, Erna Rochmawati Islam Indonesia University

Background: Predictions of health workers shortage reach 12.9 million in 2035. Nursing students dropout by 20-40% in UK and Netherlands. Dropout is characterized by decrease in achievement due to the loss of orientation and motivation of students. Objective: To analyze influence of career choice motivation and achievement on academic resilience.

Method: This study is a quantitative study with a cross-sectional design. The research was conducted at PSIK UMY. Respondents were selected using convenience sampling techniques. The number of respondents was 325 students. Data collection using Healthcare Career Choice and Academic Resilience Scale-30 Questionnaires. While the academic achievement value data was obtained from institutions.

Results: The dominant factor in career choice motivation is personal interest and perceived nature of work. Non-dominant factors are prior healthcare exposure and job prospects. Cohort 2018 has the highest average of career choice motivation. Cohort 2016 has the highest average of CBT. Cohort 2015 has the highest average of OSCE. Cohort 2018 has the highest average of academic resilience. Career choice motivation and academic achievement simultaneously influence to academic resilience by 38.7%.

Conclusion: Career choice motivation influences to academic resilience. Academic achievement doesn't influence to academic resilience. The next researcher can conduct qualitative research to identify factors that influence career choice motivation.



Teaching & learning-2 OP8B011

Development of Serious Games as Pedagogical Tools to Enhance Anatomy Education

Carrie Elzie, Jacqueline Shaia and Laurie Wellman Eastern Virginia Medical School

Serious games are educational tools that encompass a spectrum of activities, including defined objectives, a set of rules and a feedback system that allows the player to assess how close they are to achieving their goals. Serious games are increasingly being used in medical education because they have been shown

Various games were developed to serve as review of course material. These included a Taboo card game using clinical correlates, a BINGO game to review structures and a virtual escape room that emphasized structures within the head and neck. The Taboo cards were a clinical condition with "buzzwords" related to that condition that were unspeakable. Students had to try to describe a clinical condition without using the typical "red herring" words often seen in clinical vignettes. Digital BINGO cards were distributed to the class to be used during a PowerPoint review of structures and clinical vignettes. Cards contained the answers

Of these 68% reported TabooTM to be an effective review. Likability was most related to friendly competition, ability to work in small groups and its brevity as a review activity. However, students performed an average of 3.3 points higher per question compared to last year's class on related clinical correlates. All games were highly received and most students wanted to see more games incorporated into the curriculum.

Gamification allows students to deepen their understanding beyond straight memorization of topics, quickly review a large number of high yield clinical correlates and engage in friendly team competition.



Oral Presentation 15: Technology Enhanced Learning in the health professions /Career Choices
OP8C001

Student Confidence with Critical Appraisal Skills Improves Following Completion of A Structured Appraisal, Engagement With Research Doesn't

Samuel Cowley, Jonathan Bestwick
Barts and The London School of Medicine and Dentistry

Critical-appraisal skills form an essential component of Evidence-Based Medicine. With a shift in reading habits amongst modern medical students towards clinical decision tools, the onus is on medical schools to deliver teaching on these vital skills.

A two-part survey was distributed to medical students to capture their self-reported confidence with comprehension and appraisal of primary research, utilization of said research in their studies and whether these changed after the completion of a structured critical appraisal.

Post-appraisal, students (43) reported greater familiarity with the structure of primary research (P<0.001) and tools to appraise this (P<0.001). Additionally, they were more confident comprehending (P=0.004) and appraising (P=0.003) primary research. No increase in engagement with primary research was observed. Males reported greater confidence than females in the appraisal of quantitative research at baseline (P=0.039).

Future research must focus on increasing engagement with medical literature and combatting the cultural stigma which results in lower confidence comprehending and appraising research amongst females.



Technology Enhanced Learning in the health professions /Career Choices OP8C002

The Impact of Covid19 Pandemic On Anatomy Teaching

Halima Albalushi Sultan Qaboos University

Upon the declaration of covid-19 a pandemic, the emergency remote teaching was adopted by many universities and so did Sultan Qaboos University. Anatomy courses were shifted to be completely taught online. In this study, we aimed to explore students' perspective about the impact of COVID-19 pandemic on anatomy learning.

Students enrolled in anatomy courses during spring 2020 semester were asked to fill a questionnaire within 4 weeks from the end of online classes. The questionnaire included statements related to emergency remote teaching in general and aspects of learning anatomy during emergency remote teaching including learning resources, students' engagement and assessment. Results indicated that coronavirus pandemic was disruptive to students' anatomy learning.

Results indicated that coronavirus pandemic was disruptive to students' anatomy learning. Fulfilling courses requirements, home environment, internet connection and the anatomy knowledge were their main concerns. The reliability of internet connection was a major factor affecting their way of studying anatomy and their selection of learning resources. Social media platforms were helpful in assisting students for their study and communication. Assessment and practical part teaching were not well satisfactory to the students and they urge improvement. It is suggested that more effort should to be given for the replacement of 3D and cadavers exposure by online resources and synchronous teaching.

Good transition to remote teaching despite the challenges is a good indicator that online learning should be adapted and incorporated in the anatomy teaching even in normal situations.



Technology Enhanced Learning in the health professions /Career Choices OP8C003

Trauma 101: A Virtual Case-Based Trauma Conference as an Adjunct to Medical Education

Eva Yiguan Liu (BHSc), Randi Q. Mao (BHSc), Takhliq Amir (BHSc), Lucy Lan (BHSc), Simon Farquharson (BScN), James Yan (MD, FRCPC), Kevin Singh (BSc, MD, FRCPC) and Alexandra Allard-Coutu (BSc, MDCM, FRCSC)

McMaster University

COVID-19 has impacted medical curricula, limiting simulation-based trauma education and surgical rotations. Virtual learning has been integrated as an alternative, however, its effectiveness for teaching critical concepts in trauma has not been validated. Small-group sessions are an effective pedagogical model, yet it is unclear how they translate to online learning.

Medical students were invited to attend a two-day virtual trauma conference organized by student interest groups at McMaster University and promoted on social media. A total of 360 students from over 17 medical schools in five countries registered. The event included nine interactive presentations by physicians and residents in five specialties, followed by small-group case discussions. A peak of 167 simultaneous connections during presentations and 68 connections during small-group discussions was recorded. A best-match algorithm assigned students to preferred small-group sessions. Participants completed pre- and post-conference testing and feedback questionnaires. Results were analyzed using paired t-tests and descriptive content analysis.

131 students (36%) completed the pre-test with a mean score of 3.4/10 (SD=2.04). 86 (24%) completed the post-test, with a mean score of 6.3/10 (SD=2.3, p<0.001). 73 students (20%) completed both tests. Paired t-test analysis revealed improvement by 2.7/10 (SD= 2.3, 95% CI=2.17 to 3.23, p<0.001). No correlations between education/school attended and performance were found. Social media engagement resulted in 147 posts. 37.4% were participant-generated. Live polling and moderated chats improved participation. 74% of participants agreed sessions were interactive. 95.2% agreed the online platform was effective and 78.3% endorsed the conference as helpful preparation for clerkship.

With high participant satisfaction and significantly improved post-test results, this model for virtual trauma education is an effective pedagogical adjunct. Virtual small-group case-based discussions and social media enhanced participant engagement.



Technology Enhanced Learning in the health professions /Career Choices OP8C004

Electronic Medical Record (EMR) I-PASS Handover Implementation: Method to Improve The Handoff Process In Acgme-I Residency Program

Manasik Hassan, Abubakr Imam Hamad Medical corporation

EMR has revolutionized the way medical care providers interact with the patients' medical records. I-PASS arises as useful tool that can be used to improve the accuracy of the handoff information. our aim was transferring> 90% of the pediatric inpatients' written handover to EMR(I-PASS based) following AAP guidance for written handover.

A cross sectional intervention study among the pediatric training program at Sidra Medicine started in June 2019 using subjective and objective measures. It included multiple phases starting with studying the perception of the trainees for non EMR to the EMR handover, then actual transfer of the handover into EMR based I-PASS using PDSA cycles. All the records of were screened before and after using IPASS handover using the 15 elements of AAP guidance for written handover. Post-implementation data were obtained.

We were able to achieve 100% of the pediatric inpatients' written handover from non-electronic method to an electronic one over 2 month's period. The average completion of the 15 elements AAP guidance of handover in phase 1 was 56% which improved after piloting in 2 pediatric teams to 65%. In phase-2, new trainees joined the program, the average completion of the elements dropped down to 53%which improved after refreshment course of hands-on training to73%and70%(figure-1). There were 4 elements that were deficient across the whole project: diet, recent vital sign, activity and code status with average of20%,10%,3%and3% respectively (Figure-2).

Our project shows that implanting EMR handover using IPASS can be achieved safely over 2 month-period with appropriate planning and follow up monitoring. future plan of applying frequent refreshment courses.



Technology Enhanced Learning in the health professions /Career Choices OP8C005

Humanising Educational Ai Chatbots: How Medical Student Content Creators Reprogrammed An Al Database For More Human-Like Conversations

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Artificial Intelligence (AI) chatbots are algorithms which synthesise educational conversations with medical students learning subjects such as anatomy. This powerful technology has a flaw: it can be terribly boring to talk to a robot. This study examines how medical students reprogrammed an AI database for a human-like learning experience.

We evaluated the strategies adopted by a team for four medical students at the Chinese University of Hong Kong (CUHK) attempting to reprogramme an AI chatbot for anatomy teaching. The core AI database is centred on the UK Anatomical Society Anatomy Syllabus (2016) and the CUHK syllabus. The group worked independently, as a group and with medical faculty members to synthesise strategies to make the conversation more human-like. This involved mirroring human-like educational conversation patterns and reprogramming conversation pathways. The outputs of these simulated dialogues were evaluated qualitatively by faculty and students, and four main themes emerged from the outputs.

The four themes which emerged were: Multi-layered pathway design, use of native language, use of humour and use of memory aids. Multi-layered conversations were designed to stagger deployment of information from initial facts to meta-cognitive elements triggered by conversation words such as "Can you explain further" or "How do I remember?" Native language terms (Cantonese) were linked to database items; mirroring student experiences of teachers elaborating concepts in their native tongue. Incorporation of humour in the database mimics use by educators to engage students, alongside tools to aid memory including the origin of words (etymology) and mnemonics.

Educational technology design demands a human touch. Students have a closer cultural proximity to end users and educationalists may consider using student-teacher teams to calibrate and humanise their educational software.



Technology Enhanced Learning in the health professions /Career Choices OP8C006

Virtual Laboratory Physio Ex 9.1 Improves Students' Performance in Physiology Course for First Year of Medical School

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Laboratory activity is one of self-learning method that potentially increases student interest and understanding in medical basic sciences. The aim of this study is to know the effect of using the simulation PhysioEX 9.1 software as a virtual laboratory on academic achievement of first year medical student in Physiology Course.

This study compared academic achievement of 937 first year medical students from 2014 to 2018 in Universitas Brawijaya, one group including virtual laboratory and another one without virtual laboratory method. Group of students with virtual laboratory performed some experiment from PhysioEX 9.1 as individual task guided by tutor in computer laboratory. This computer based learning enabled student to perform simulated laboratory actions, knowing the consequences of each of their actions, making hypothesis and conclusion by answering a series of questions. After completing these tasks, students were required to complete a survey containing student perception of studying using PhysioEX 9.1. Result of this study showed that virtual laboratory applications made significantly positive effects on students' academic achievements in Physiology course when compared to traditional teaching methods. After using virtual laboratory, there is increasing total number of students that can pass physiology course with score more than 56 out of 100 (p>0.000). Data of student perception revealed that 97,6% students perceived that virtual laboratory can increase understanding of physiology and 84,9% students interested in join virtual laboratory again. In conclusion, this virtual laboratory method enhanced Physiology learning of first year medical student.

In conclusion, this virtual laboratory method enhanced Physiology learning of first year medical student.



Technology Enhanced Learning in the health professions /Career Choices OP8C007

A Dynamic Risk Management Approach for Reducing Harm During Residency from Invasive Bedside Procedures

Paul Barach, Eric J. Warm
Wayne State University School of Medicine

Deciding when a trainee is ready for unsupervised patient care is not easy. Early unsupervised care can impact the patient's safety, add to the cost of care, and increase liability for the organization. Expertise in procedural skills typically progresses from early stages marked by imitation or trial and error to

to highly coordinated performance, to the ability to create new movement patterns that address previously unencountered situations. Learning curves demonstrate that the steepest level of learning generally occurs between 20 and 50 cases, but deep immersive learning continues to grow even after hundreds of cases and perhaps throughout one's career. Residents perform invasive bedside procedures during residency training. Bedside procedure training may compromise patient safety. Current evidence suggests that training programs rely on the number of procedures completed during training as a proxy for resident competence instead of using objective post-procedure patient outcomes. Results of procedural training effectiveness should be

Results of procedural training effectiveness should be reframed with outcome metrics rather than process measures alone. The paper introduces the concept of As Low as Reasonably Achievable (ALARA) approach, which originated in the nuclear industry to increase safety margins, to help assess and reduce bedside procedural risks. Training program directors are encouraged to use ALARA calculations to define the risk trade-offs inherent in current procedural training and assess how best to reliably improve patient outcomes. We will review five options to consider including: (1) training all residents in bedside procedures; (2) training select residents in bedside procedures; (3) training no

residents in bedside procedures; (4) deploying 24-hour procedure teams supervised by faculty; and (5) 24-hour procedure teams. Quality improvement approaches can be effectively design and implement curriculum choices.



Technology Enhanced Learning in the health professions /Career Choices OP8C008

Effect of COVID-19 on Mental Health of Medical Students Across Africa: A Cross-Sectional Survey of 33 Countries

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Alemayehu, Nicki Byl, Caren M Stalburg
Saint Paul's Hospital Millennium Medical college, University of Michigan Medical School

Covid-19 disrupted medical education across the globe. Medical students experience depression and anxiety at higher rates than the general population. Our study aims to evaluate how the mental health of medical students in Africa was affected by COVID-19 related changes to their education.

A 39-item survey composed of Likert scale (LS), dichotomous, and free-response items was used to examine the impact of COVID-19 on medical education. The survey assessed domains of class structure changes and timing, patient interactions, exam administration, learning environment satisfaction, mental health impacts, and volunteer opportunities/engagement. This anonymous electronic survey was sent to medical schools across thirty-three African countries. Medical students were reached via an established social media network under the International Federation of Medical Students Association (IFMSA). Participants were from all years of medical school. Quantitative analysis was completed using R and Excel.

694 medical students across 33 African countries completed our survey. 94.1% responded to :"How was your mental health affected by the pandemic-related medical education changes". 9.45% were extremely negatively impacted, 35.03% were negatively impacted, 32.99% were neither positively nor negatively impacted, 17.59% were positively impacted, 4.94% were extremely positively impacted. The average score was 3 with an increase toward negative as disruption time lengthened. Resuming classes within 60 days (n: 140) had a score of 3.1; 60-180 days (n:177) score of 3.3. Not yet resumed (n:217) score of 3.4.

Covid-19 and related mitigation measures have caused unprecedented disruptions to medical education. The mental health challenges of this disruption for medical students have important implications for future public health.



Technology Enhanced Learning in the health professions /Career Choices OP8C009

Assessment of Covid-19 Related Preventive Measures in Medical Students of Pakistan and Their Variation with The Presence

Shoaib Ahmad Punjab medical college

Lack of knowledge in medical students can lead to increased rates of infection, stress, anxiety and alterations in application of their medical knowledge. To assess necessary practices regarding COVID-19 prevention among medical students and assess differences among clinical and pre-clinical students. Also, to identify effect of having COVID patient.

The cross-sectional study included medical students from Micro-fest++ event held on 30th May 2020. Participants filled a questionnaire of 15 questions regarding practices of COVID preventive measures. It had satisfactory reliability (Cronbach's alpha = 0.715) and validity. For analysis, IBM SPSS 26.0 was used. Chi-square and Independent sample t test were used for comparison among groups.

Out of 1342 medical students, majority were female (N=881, 65.6%). Greater proportion (47%) of students fell in very good practices range (>85.7%) (p<0.05). Clinical year students as compared to pre-clinical students responded positively to all questions, except one and had better score 11.90 ± 2.28 (out of 14) as compared to 11.61 ± 2.37 (p<0.05). Significant difference was noted for "Information on preventive measures" (p<0.01), "Avoiding crowds and staying home" (p<0.05), "Social distancing (maintain 3 feet)" (p<0.01), and "Practices of disinfection after going outside" (p<0.05). Having COVID positive relatives resulted in higher positive responses for practices.

Overall, medical students showed good practices with greater proportion of clinical students and with those having a COVID positive relative showing better adherence to practices.



Technology Enhanced Learning in the health professions /Career Choices OP8C010

Covid-19 And Medical Education: A Four-Part Model to Assess Risks, Benefits, And Institutional Obligations During A Global

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The coronavirus has brought unprecedented changes to health care and medical education. The global pandemic and national health care crisis necessitated leaders to assess the risks and rewards of particular clinical placements for medical learners (medical students and residents /fellows). We offer a framework to guide medical schools and teaching hospital leaders' decisions about the deployment of these learners during the pandemic. To create this framework, we drew on information about minimizing the risks in inherently dangerous industries, learned from practices during earlier outbreaks of dangerous infectious disease, and sought guidance from ethics experts. Our guiding considerations are:

1. The degree of risk inherent to learners in a given clinical or educational activity during the pandemic by using the principle of as low as reasonably achievable (ALARA) adapted from the nuclear industry;

2. The anticipation of an ethical benefit that balances the risk to help in considering the benefits in

the context of supporting formal risk-benefit assessments; 3. Specific efforts at the program and institution levels to reduce risks for medical learners; and 4. An explicit process of informing learners about exposure risks of service deployments during a pandemic and obtaining formal consent. Hospital and medical education leaders need to find more effective, ethical, and transparent ways to reduce the exposure risk inherent in deploying medical students and residents/fellows during a pandemic and to balance these risks and benefits to patient care and education, including issues of commitment, development of clinical competencies, collegial loyalty, and social identity.

A risk-benefit approach to medical education supports decision-making that is able to offset activities that carry a higher risk in instances when fully disclosed risks are offset by anticipated benifits.



Oral Presentation 16: Communication skills/Continuing Professional Development (CPD) OP8D001

Experiences of Near-Peer Teachers in Medical Student Anatomy Education: A Qualitative Analysis

Shreya Gupta, Shivank Keni, Liam Seungjin Lee, Siobhan Connolly University of Edinburgh

Near-peer teaching provides medical students with early exposure to teaching. The tutor's experience of near-peer teaching remains largely unexplored; understanding this could provide insight into how near-peer tutors (NPT) self-organise and help identify areas for support. We explored NPTs' experiences of near-peer teaching in medical student anatomy education.

Institutional ethics approval was obtained. NPTs were voluntarily recruited to deliver 6 wetanatomy tutorials for pre-clinical students at a Scottish medical school in the 2018-2019 academic year. NPTs were instructed to teach a pre-specified curriculum but were given the opportunity to develop lesson plans and handouts. Qualitative feedback forms were circulated immediately to NPTs after each session to ascertain methods of preparation and overall tutorial experience. Three assessors independently applied a constructivist approach to code responses and generate themes, which were subsequently discussed and synthesised.

35 NPTs participated in the scheme and 31 provided feedback. Tutors were from four years of medical school (35.5% 2nd year, 48.4% 3rd year, 12.9% 5th year, 3.2% 6th year). The majority of the tutors were female (71.0?male, 29.0% male). Six major themes were generated from NPT feedback. These concerned: preparation and self-organisation, guidance and support, practicalities of teaching, engaging tutees, perceived value of teaching and becoming better educators. NPTs requested support for the following: guidance on teaching methods, preventing tutor and tutee fatigue, providing sufficient exposure to prosections and feedback to facilitate professional development.

Our findings provide insight into NPTs experience of teaching and areas for support; this will help guide the design and delivery of NPT programmes in future.



Communication skills/Continuing Professional Development (CPD) OP8D002

Disclosure of Personal Information by Healthcare Professionals During A Consultation

Mitchell Canaday, Andries J Muller University of Saskatchewan

Previous studies have reported mixed results about patient satisfaction with disclosure of personal information by their physicians. Physicians often wonder how patients will react to disclosure of personal information. It was decided that a study about this would be beneficial to our cultural context in North America.

Seventy-five consultations at a Primary Health Centre were included in the study. Informed consent was obtained. Participants were told that the study revolved around communication skills and would be used to help teach future healthcare workers. The physicians were given pre-planned pieces of personal information to disclose, relating to health concerns that were anticipated. Sensitive topics such as mental and genitourinary issues were excluded, as were patients under the age of 18. The participants were given a questionnaire afterwards for their perspective on the disclosure of personal information. They were then debriefed about the purpose and methodology of the study.

The results of the study were overwhelmingly positive. None of the participants felt that the disclosure of personal information was inappropriate. Many of the participants did believe that disclosure of personal information by their physician was appropriate only in certain situations and if the physician does not cross boundaries. Themes that emerged included: Patients felt more at ease / comfortable after physician disclosed personal information, Patients felt physicians understood and could relate to their problems better after disclosure of personal information, Self-disclosure by physicians brought a human element to the consultations and Self-disclosure builds trust and enhances patient-physician relationships. Disclosure of personal information by a physician to their patients has a positive effect. The recommendation is that physicians disclose personal information to their patients in a professional way.



Communication skills/Continuing Professional Development (CPD) OP8D003

Entrustment of Patient Communication: A Systematic Review of The Literature

Ayesha Younas Wah medical college

Efficient Communication with patients is a necessity for every physician. This systematic review of the literature was carried out to highlight the importance of physician patient communication and to identify the most common patient communication related tasks that could require Entrustment decisions in the form of Entrustable professional activities. This systematic review was carried out using the PRISMA-P protocol. A thorough, comprehensive and systematic review of the literature was carried out on three different databases/search engines. Articles appearing in key word searches using Boolean operators were eyeballed. Suitable articles were selected and abstracts were read. The articles selected from these steps were enlisted in the PRISMA flow diagram and Qualsyst criteria was applied to them. A critical appraisal of the articles was done and identification of various themes was completed

Initial search after application of key words and consulting reference books yield 126 articles. Out of these 25, were for EPAs, 19 for physician patient communication, 12 for breaking bad news, 22 for informational care, 15 for counselling and 10 for conflict resolution. final full test articles assessed for eligiblity were 103. Application of qualsyst resulted in selection of 30 studies in this systematic review.

The findings of this literature review will be used to formulate a survey questionnaire in order to get experts opinions on desired EPAs for physician-patient communication



Communication skills/Continuing Professional Development (CPD) OP8D004

Effects of Photo Voice on The Verbal Skills of The Patients With Communication Disorder

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Patients with communication disorders usually lack expression, are pessimistic and their low motivation for speech therapy results in dropout. To determine the effect of Photovoice as an expressive therapy for the improvement of verbal skills in patients with communication disorders. To evaluate the perceptions of people with communication disorders

This study was used as a participatory research approach. A total of 6 participants (4 Aphasia and 2 Dysarthria) from the Armed Forces Institute of Rehabilitation Medicine, Rawalpindi and Physiotherapy Clinic, Rawalpindi were recruited for this study. The Pre Post analysis of their condition was taken by using the Communication Checklist-Adults. The training was done with participants in photography and in making captions for each of their photos. To help them with interpretation and to develop a deeper insight SHOWeD method was used to ask them different questions. The final interpretation and analysis were done by careful reviewing of

The sample consisted of 6 participants (Male 66.7% & Females 33.3%) diagnosed with Aphasia 66.7% and with Dysarthria 33.3%. The pre-post responses were analyzed statistically in terms of mean and standard deviation and result illustration showed significant difference with p = 0.04. The results indicate an overall improvement in the expressive skills of the participants that have also impacted in enhancing their verbal skills. The themes generated from the study are "Being healthy is a blessing, My feelings post-stroke, Memories, Reality of life, and Lack of emotional support".

It can be concluded from the results that Photovoice can be effectively used as an expressive therapy to enhance memory, increased willingness to communicate verbally, and improving healthy expression.



Communication skills/Continuing Professional Development (CPD) OP8D005

Building Supportive Networks Through Coach and Mentor Skills Training

Emily Boardman, Kathryn Young, Bruce Hobson University of British Columbia

UBC CPD's Coaching and Mentoring Program (CAMP) fosters peer connections in rural BC to improve practice, increase confidence, and facilitate connections between rural colleagues. Coaches and mentors are the backbone of peer support delivery and it is important they have the tools they need to support their peers.

Expert coach facilitators lead monthly virtual skills training sessions to ensure coaches and mentors have the tools, resources, and support they need. These sessions provide the opportunity for participants to connect with colleagues in the program, and learn and develop key coaching and mentoring skills. There are a number of factors that have led to the success of these sessions, such as creating a safe space for participants to share, utilizing virtual breakout rooms, building an engaging and inclusive small group learning environment, and giving participants access to self-paced lessons and resources on the CAMP Online Portal. Coaches and mentors reported numerous benefits from participating in monthly virtual skills training sessions, including enhanced coaching and mentoring skills, increased confidence in their roles as a coach or mentor, and stronger relationships with their peers. Participants learned useful approaches for coaching and mentoring that allowed them to be more effective when supporting a colleague. Through learning and practicing skills, and having a platform to share stories and ask questions, participants felt better prepared to be a mentor or coach.

Developing CAMP coach and mentor skills, confidence, and peer networks gives them the tools to not only become better coaches and mentors, but to be better health care professionals.



Communication skills/Continuing Professional Development (CPD) OP8D006

Journey Towards Implementing "Community Based Medical Education (CBME)" at IMC

Inayat Ullah Memon¹, Tazeen Shah²

¹Indus Medical College, ²Jinnah Sindh Medical University

Till last few decades doctors were mainly trained in tertiary care hospitals. Appreciating need of competency in community's sufferings and health; during last 30-40 years, medical education has undergone significant re-formations and re-organization in its delivery and medical personnel training; resulting focus on communities 'health i.e. Community-Oriented Based Medical Education

To comply with the obligations of national medical regulatory authority, to incorporate COME in curriculum, a pilot program was formulated, to help add final COME component in curriculum. The Curriculum Committee designed a 4-week COME program, for 6 residents of year-one, was held at nearby rural health facility, about 2 kms from Indus Medical College Hospital (IMCH). The selection of Specific Learning Objectives was based on the results (anemia) of patient's Blood Picture, i.e. to ascertain cause of gross anemia. The learning objectives i.e. Cognition, Psychomotor and Affective included e.g. conversation with patients, history-taking, examination and interpretation of blood smears.

Based on the Table of Specification (TOS) formulated by Assessment Committee allocating appropriate weightage to each Learning Objective (LO), incorporating all three domains of learning (Knowledge, Skills, Attitude), relevant to the training objectives. The assessment of residents was conducted including the tools, such MCQs, OSCE, WPBA, DOPS, Short Essay Question (SEQs) and Practical demonstrations etc. Out of 6 residents, 3 secured more than 80%, 2 had between 80 and 70% and one got less than 70% score. Based on these results, it can be justifiably inferred COME training is should be part of doctors in training.

Secured score of COME trained residents was compared with residents of same year in the matched subject. Observation was, COME residents had at least 15% score higher than inhospital residents.



Communication skills/Continuing Professional Development (CPD) OP8D007

Independent Stage as A Learning Model in Achieving Competency Module of Professionalism Development Program in Residency Program

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Catherine Jusuf, Arlen
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Competence and professionalism are two main aspects of an Obstetrics and Gynecology (OBGYN) specialist. A continuous learning process, introduction, development, and training are needed, both through classroom learning sessions and practice in real situations so that learning objectives can be achieved within the OBGYNs' Doctor Education Collegium allotted time.

Literature research and observation of OBGYN residents learning activities in the professional development module with independent stage activities as a learning model were conducted The standard collegiate professionalism development module is prepared as a learning reference for assessing professional competence achievement. In this module learning activity, OBGYN residents carry out an independent stage in a regional education network hospital for 2 to 3 months with various activities, both in education and health services aspects. Learning objectives to achieve competence: 1) Communicating and Providing Counseling, 2) Teamwork and Leadership, 3) Administration and Service Management, 4) Negotiating and Motivating Others, 5) Carrying Out Clinical Training, and 6) Doing good medical practice and professional accountability

The independent activity stage of OBGYN residents increased professional competence achievement. The independent stage becomes a learning model for achieving the competency of the professional development module



Communication skills/Continuing Professional Development (CPD) OP8D008

Future Specialty Choice and Training Abroad Intention of Senior Medical Students at Faculty of Medicine University of Khartoum 2018

Hiba Yousif Merghani Awadallah University of Khartoum

Medical students are the country's future doctors. Defining medical student's future career plans is a key for developing balanced health system in the country. Objective is to identify career decisions of senior medical students, its influencing factors and their intention to study abroad at the faculty of medicine UofK 2018.

A facility-based cross-sectional study conducted in November 2018 at Faculty of Medicine, University of Khartoum. A self-administered semi-structured questionnaire was implemented to collect relevant data related to student's characteristics, future specialties, factors influence specialty choice, and study abroad. Systematic random sampling was applied to recruit 228 male and female students, from fifth and sixth academic years.

Response rate was (94.7%) with 216 questionnaires collected, out of 228 eligible medical students. Students in this study had a positive and realistic knowledge about postgraduate specialties, (198, 91.7%) know the available postgraduate specialties. But only (78, 36.1%) students have decided their future specialty preference. Internal medicine, surgery, and paediatrics were ranked higher as preference to practice in future. "personal interest", followed by "previous positive experience, then "expected income" were most prominent. Most students were interested in specializing outside Sudan (82.4%). The two most common countries of choice were the UK (41.2%) and USA (12%).

Most students were uncertain in deciding their future career which is based on only assumptions with no guidance. Specialization board and deaneries should act vigilantly regarding career guidance for students.



Communication skills/Continuing Professional Development (CPD) OP8D009

A Review of the Quantity of Letters to The Editor by Medical Students in Medical Education Journals

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Amy Divecha, Russell Hearn
King's College London

To analyse the total number, percentage and affiliation of Letters to the Editor published by medical students in medical education journals.

A review of 15 medical education journals that had an impact factor was conducted to identify the number and percentage of Letters to the Editor by medical students between July 2018 and June 2020. Additionally, information on the affiliation of the medical students was collected.

Over a two-year period, 299 letters were published by medical students which equated to 45.9% of total letters. There was a 60% overall increase in letters by medical students published in the first 12 months compared to second 12 months. During this same period the overall number of letters published increased by 27%. A large proportion of letters by medical students were contributed by a small number of medical schools with five schools accounting for 60.5% of letters, and 86% of the letters published by UK medical students over the two-year period.

Overrepresentation of UK medical students and an increase in letters published from 2018/19 to 2019/20 supports the hypothesis that medical students are publishing letters to achieve a PubMed ID.



Communication skills/Continuing Professional Development (CPD) OP8D010

Assessment of Covid-19 Related Preventive Measures in Medical Students of Pakistan and Their Variation with The Presence

Sohaib Ahmad Punjab medical college

Lack of knowledge in medical students can lead to increased rates of infection, stress, anxiety and alterations in application of their medical knowledge. To assess necessary practices regarding COVID-19 prevention among medical students and assess differences among clinical and pre-clinical students. Also, to identify effect of having COVID patient.

The cross-sectional study included medical students from Micro-fest++ event held on 30th May 2020. Participants filled a questionnaire of 15 questions regarding practices of COVID preventive measures. It had satisfactory reliability (Cronbach's alpha = 0.715) and validity. For analysis, IBM SPSS 26.0 was used. Chi-square and Independent sample t test were used for comparison among groups.

Out of 1342 medical students, majority were female (N=881, 65.6%). Greater proportion (47%) of students fell in very good practices range (>85.7%) (p<0.05). Clinical year students as compared to pre-clinical students responded positively to all questions, except one and had better score 11.90 ± 2.28 (out of 14) as compared to 11.61 ± 2.37 (p<0.05). Significant difference was noted for "Information on preventive measures" (p<0.01), "Avoiding crowds and staying home" (p<0.05), "Social distancing (maintain 3 feet)" (p<0.01), and "Practices of disinfection after going outside" (p<0.05). Having COVID positive relatives resulted in higher positive responses for practices.

Overall, medical students showed good practices with greater proportion of clinical students and with those having a COVID positive relative showing better adherence to practices.



Oral Presentation 17: Peer assisted Learning/Problem based learning OP8E001

How are The Medical Humanities Incorporated into Undergraduate Medical Education in The UK?

Laith Evans Norwich Medical School

The medical humanities influence on medical practice and education is growing rapidly. I have investigated how the medical humanities are included within the undergraduate curricula of two UK medical schools and as intercalated degrees. I aim to comment on their benefits and how they can be better included in curricula.

I conducted a literature search to highlight the benefits of the medical humanities on medical practice and medical education which identified published journal articles and books for inclusion. I have used case studies of two UK medical schools to exemplify how the medical humanities are currently being included in British undergraduate curricula. Using the sources identified in my literature search I was then able to show the benefits and drawbacks of each case study's curriculum. I explore the option of intercalating in the medical humanities as another case study and what benefits this offers undergraduate students.

Literature advocates for the inclusion of the medical humanities in undergraduate curricula to humanise future doctors and improve their compassion and empathy skills. The case studies show that UK medical schools are not including the medical humanities extensively in their curricula, with mostly only individuals who have a particular interest opting to study them. Intercalated degrees suffer from the same issue. Greater incorporation of the medical humanities could be achieved by establishing specific medical humanities faculties at institutions. Greater inclusion of the medical humanities would result in increased awareness of its benefits and increased uptake – establishing a fortuitous cycle.

Analysis of all UK medical school curricula must occur to fully understand how the medical humanities are included. Schools should increase medical humanities teaching as a compulsory element of curricula.



Peer assisted Learning/Problem based learning OP8E002

How Near Peer Mentoring Programs Can Promote Medical Students' Motivational Needs and Perceived Competence

Bryden Hughton, Javeria Muhammadzai, Adam Neufeld, Meredith McKague, Greg Malin University of Saskatchewan

Mentorship programs are ubiquitous in medicine. However, the majority simply pair students together, without equal emphasis on mentee and mentor development, nor on clinical skills. Mentorship programs could be strengthened by these factors, by promoting learners' basic psychological needs, described by Self Determination Theory (SDT): autonomy, competence, and relatedness.

This study assesses medical students' perceptions of how need-fulfilling the learning environment is within the University of Saskatchewan's near peer mentoring program, PULSE (Peers United in Leadership & Skills Enhancement). Regression analysis is used to determine the impact that learners' need-based experiences have on their perceived competence, either about learning or teaching of clinical skills material. In addition, qualitative feedback is examined to further interpret how the program performed in satisfying students' basic psychological needs.

Learners and mentors both rated PULSE as highly need-supportive, which in turn, correlated with higher perceived competence for learning and for teaching clinical knowledge to others. Interestingly, and in keeping with SDT, fulfilment of all three needs (but none individually) was necessary, in order to achieve this statistically significant result.

Our findings suggest that mentorship programs which focus on supporting learners' psychological needs may promote their self-determination to learn, their confidence in their clinical abilities, and their feelings of connectedness.



Peer assisted Learning/Problem based learning OP8E003

Peer-Taught Virtual Research Workshops for Medical Students in Pakistan: A Sustainable Solution for Student Research

Ayesha Niaz Shaikh, Ronika Devi Ukrani, Russell Seth Martins, Hamna Amir Naseem,
Mishall Baig, Syeda Sadia Fatima
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South Asia has not been a major contributor in the medical research pool, mainly because of the lack of encouragement and opportunities to students. With the increase in online learning systems, we aim to assess the effectiveness of a comprehensive virtual research course among medical students of Pakistan

This quasi-experimental study assessed the effectiveness of five, virtual research workshops (RWs) in improving the basic research skills in following areas; Initiating Research, Manuscript Writing, Ethics, Data Collection and Analysis. Medical students were enrolled from all over Pakistan and RWs were conducted over Zoom. Improvement in each RW was assessed via pre- and post-tests after each RW, self-efficacy scores and feedback forms.

A total of 307 medical students, with mean age of 21.37 years were enrolled in the RWs. Most students (60.9%) did not have any research experience and the majority (59%) had not attended any RWs previously. The cohort demonstrated significant improvement in pre- and post-test scores for all 5 RWs (p<0.001) with greatest improvement in Data Collection and Analysis) with mean difference of 34.65 ± 24.49 . In addition, all 16 self -efficacy scores also showed highly significant improvement (p<0.001). Participant satisfaction was also high with 90% of the participants rating the workshop as either "good or excellent" .

This study demonstrates the utility of virtual RWs in improving the research related knowledge and skills among medical students.



Peer assisted Learning/Problem based learning OP8E004

Problem Based Learning and Team Based Learning Efficiency Among Postgraduate Nursing Students: A Cross Sectional Study

Amina Unis RAK medical and health science university

Teaching strategies in the field of medical education nowadays include the traditional problem based learning (PBL) and the newly developed team based learning (TBL). Hence the present study was developed to compare the efficacy of TBL and PBL among postgraduate nursing students and their impact on their learning process.

Two similar semi structured questionnaire survey was developed to record students feedback on PBL and TBL sessions and were distributed to all postgraduate nursing students registered in RAK medical and health science university for the academic year 2018-2019. The questionnaire aimed to evaluate and compare the three most important levels of educational evidence: reaction, learning and behavior domains through quantitative questions. Quantitative questions were scaled from 1 to 5 depending on level of agreement (with 1 corresponding to least agreement and 5 relating to highest agreement). Moreover, three qualitative open ended questions were added to accommodate any additional suggestions from the students

Overall students reported that they benefited significantly from PBL sessions when compared to TBL sessions especially regarding learning domain. The students found positive aspects of their PBL experience to include correction of their mistakes, enhancement of their thinking process and improvement of their problem solving abilities. Students perceived that TBL sessions enhanced their self-evaluation process, improved their communicate skills and helped them to analyze clinical scenarios. Some students reported that TBL failed to prepare them for their exams while other students found that PBL did not help them to study on daily basis.

TBL has some positive impact on the process of medical education while still PBL is the students preferred learning method. Proper integration of both technologies is needed to maximize benefits



Peer assisted Learning/Problem based learning OP8E005

Students' Perspective On PBL (Problem-Based Learning) Online Procedure: A Descriptive Study

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Pangastuti, Tri Wahju Astuti
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In preventing covid19 pandemic transmission, medical educations are promptly shifting all educational activities to online classroom format. Online setting for PBL could be a challenge for both faculty members and students. We aim to explore students' perspective on PBL online procedure for helping them in engaging PBL.

A student satisfaction survey concerning the newly established procedure for PBL online and their understanding of it were conducted. In this descriptive design study, we collect data from 707 students applying PBL online method. Our first trial of PBL was only taking benefit of Zoom or Google-meet to facilitate synchronous learning between students and their facilitator of PBL. Subsequently, we equip our setting by joining it with WhatsApp application and google classroom to make the process be flexible but administratively arranged.

The data shows that majority of students, about 70,29% claimed their understanding with the PBL online procedure. Although various platform is applied concurrently under more complex setting, students believe that the procedure was still easy to follow. Furthermore, having no difficulties in implementing PBL online, students were satisfied with the procedure established stated on level of about 60%.

PBL online requires sophisticate preparation using various digital platform. Clear steps of procedure adapting all requirements of online setting for PBL would contribute to students' satisfaction and their learning impact.



Peer assisted Learning/Problem based learning OP8E006

The Effect of Pharmacology Teaching On Diverse Learners in A Problem-Based Learning (Pbl) Medical Curriculum

Persoulla Nicolaou University of Nicosia Medical School

Effective pharmacology learning can contribute to preparing medical students to become safe prescribers. PBL was introduced to address the limitations of passive teaching in medical education. We sought to investigate the effectiveness of pharmacology teaching on diverse learners in a PBL setting.

All Year 1 students, of the 4-year undergraduate medical program, at St George's University of London and University of Nicosia, were invited to participate. A 50-item single-best-answer test assessed pharmacology knowledge in the beginning (pre-test) and end (post-test) of the academic year. Student characteristics investigated included age, gender, nationality, ethnicity, educational background, native language, PBL experience and academic ability. The effect of learning style and learning approach were assessed using the VARK (Visual, Auditory, Read/Write, Kinesthetic) and Study Process questionnaires, respectively. Non-parametric tests (Mann-Whitney U-test, Wilcoxon signed-rank test, Spearman's correlation) investigated potential correlations between learner characteristics and pharmacology performance.

74 students participated in the study. A statistically significant increase in performance was noted in the post-test as compared to the pre-test (pre-test: mean 19.38; SD: 4.38; post-test: mean: 29.57; SD: 5.41; p<0.05). While the performance was not correlated with the aforementioned demographic characteristics, significant correlations were identified with approach to learning and learning style. Specifically, surface learning was predictive of lower performance at the pre-test (rs = -0.26, p < 0.05). Interestingly, this correlation was not significant at the post-test. The kinaesthetic learning style was associated with better performance in the post-test, independent of academic ability.

Our results suggest that pharmacology teaching in a PBL-based curriculum may be effective for diverse learners, including surface learners. Kinaesthetic learners may benefit to a greater extend from PBL.



Peer assisted Learning/Problem based learning OP8E007

The Profile of Critical Incidents During Online PBL Tutorial Based on Student's Perception. Study in Fk Unsoed

Catharina Widiartini Faculty of Medicine, Jenderal Soedirman University, Indonesia

Online PBL tutorials were conducted to comply with social distance requirement during Covid-19 pandemic. Critical incidents (CI) due to the new learning environment may cause group dysfunctionality. Data of CI based on student's perception was necessary for evaluation purpose, especially due to the unknown ending of the pandemic.

Questionnaire in google-form format was self-assigned by 249 students of Faculty of Medicine, Jenderal Soedirman University, batch 2017-2019. The first part of the questionnaire consists of 45 examples of 6 CI factors adopted from previous studies that used offline tutorial context. Respondents were asked to identify the frequency of each CI. They may report the other CI, especially those related to the online context of the tutorial. The second part of the questionnaire asked the respondents to identify the CI factor that was the most common, the most disturbing task and group functioning and the most needed tutor intervention.

Most students reported that the 34 out of 44 critical incidents as never happened and "Challenged by the tutorial-trying hardly to search for and answer all of the learning issues" as always, almost always and not always happened. Most students perceived that: the participation imbalance as the most frequently happened; lack of interaction as the most disturbing task function and social function and the lack of motivation as the most needs of tutor intervention. Issues related to the online nature of the tutorial were only related to the unstable internet connection and disadvantages of using different discussion platforms.

The critical incidents reported are quite similar with the offline context. Most are perceived as never happened. Similar study based on the tutor's perception is needed to complement the analysis.



Peer assisted Learning/Problem based learning OP8E008

Perception and Experience On Peer-Assisted Learning in Formative OSCE Among Undergraduate Medical Students: A Focus Group Study

Nurul Haizum Farah, Diyana Latjatih Universiti Putra Malaysia

Peer-assisted learning (PAL) is a mutual learning which students alternately change their role as tutor and tutee. It gives opportunity to enrich the students' knowledge apart from formal teaching in the classroom. This study sought to explore students' perception and experience on PAL during formative OSCE.

Forty-three Year 2 medical undergraduates participated in PAL during formative OSCE. Each of them had an opportunity to be an examiner and provide feedback to their peers, as well as to be an examinee and receive feedback from their peers. Focus group discussion was then conducted at the end of the sessions to explore their perception and experience. The focus group participants were chosen using purposive sampling and the sample size was guided by saturation. Data from the focus groups were analysed using thematic analysis in Microsoft Excel software to categorise the codes into themes.

Twenty-three participants participated in the focus group discussion. Based on the analysis, five themes have emerged from the discussion i.e. definition, pulling factors, affecting factors, advantages and disadvantages of PAL. The participants perceived PAL in formative OSCE helped in improving their self-confidence. They also found PAL as a meaningful assessment, an opportunity to experience a collaborative learning environment and ideally complements formal classes' learning experience. However, the participants still need to seek knowledge confirmation from educators apart from the PAL sessions. Some participants also stated that they felt uncomfortable to give feedback to their peers.

Students benefit from PAL, but they still need reassurance from experts to enhance knowledge and understanding. We suggest that PAL can be practised in higher education, especially in medical curriculum.



Peer assisted Learning/Problem based learning OP8E009

Integration of Native Languages in Medical Curriculum? Removing a Hidden Barrier in Effective Communication

Abida Shaheen, Fahad Azam, Afrose Liaquat Shifa College of Medicine

Instructional medium in medical institutions in developing countries is English. Though medical students can communicate in native languages, understanding of medical terminologies/symptoms of diseases in native languages is difficult due to language barrier. Aim of study was to increase awareness among students to learn medical terminologies in native languages.

We enlisted fifty common medical terminologies in English and thirty common terminologies in native languages (Urdu, Punjabi and Pushto) which are likely to be used by patients while giving history. Ninety-eight medical students of year III at Shifa College of Medicine were asked to translate the terminologies in English to native languages and terminologies provided in native languages into English. Students were also asked about the need to incorporate native languages in their curriculum.

Out of the fifty common medical terminologies enlisted in English, students translated 13% into Urdu, 2% in Punjabi and less than 1% into Pushto. Out of the thirty listed medical terminologies in Urdu, students translated only nine percent terminologies into English. Eighty-nine percent students expressed the need of incorporation of common medical terminologies in native languages in their curriculum. Medical text books in English in most developing countries may create a language barrier to communicate effectively with patients in local languages. Common medical terminologies in local languages may be added in curriculum and study guides.

Importance of local languages, cultural understanding for effective doctor-patient communication is imperative. Many patients communicate in native languages and language barriers should be taken into account in designing/delivery of curriculum.



Peer assisted Learning/Problem based learning OP8E010

Comparison of Peer-Assisted Learning with Traditional Teaching in Family Medicine: A Quantitative Study

Dr. Muneeza Aamir Sami, Professor Dr Lubna Baig Shifa College of Medicine

Peer Assisted Learning or PAL is teaching by the learners to the learners. There are very few studies on reciprocal PAL and even fewer in the Pakistani context. This research aims to compare the academic performance of students taught through PAL with those taught traditionally by the faculty.

It was an experimental study with a pre-test and a post-test design. The students were randomly divided into control and intervention groups. The test scores of both the groups of students were compared using paired and independent-sample t-tests.

The difference in the mean scores of both the groups was not significant as depicted by a p-value of more than 0.05.

Peer Assisted Learning is comparable to faculty-led teaching and if implemented properly with thorough planning can have long term advantages both for the students and the faculty.



POSTER PRESENTATION



Poster Presentation 1: E-learning PP1F001

Evolving Perception of Students Regarding E-Learning in Covid-19 Era in A Master Program in A Pakistani University

Amina Nadeem, Azhar Rashid Riphah International University

Imparting quality online education for the students with diverse educational background in COVID-19 era is challenging for both students and teachers. The objective was to analyze the evolving perception of students of 'Health Professional Education' Master program regarding online learning and teaching at the end of two online teaching sessions.

This 'Mixed-Method' study of 'Convergent Parallel Design' was carried out from Mar—Sep 2020 at Riphah University, Rawalpindi, Pakistan. A total of 25 graduate students of 'Health Professional Education' were selected after purposive sampling and informed consent was obtained. These students had diverse educational background. A semi-structured questionnaire was designed which comprised of 17 items out of which 11 were on 5-point Likert scale and rest were open-ended items. The questionnaire was distributed at the end of each 10-days online teaching sessions. The quantitative data was analyzed on SPSS-25 and qualitative transcribed data was analyzed following the protocol.

Quantitative data analysis revealed the mean scores of 'Student's perception of learning', 'Contents and Teaching Strategies' and 'Educational environment' domains in 1st vs. 2nd online sessions as follows respectively: $(4.37 \pm 0.42 \text{ vs. } 4.09 \pm 0.45; \text{ p value } 0.04)$, $(4.40 \pm 0.47 \text{ vs. } 4.29 \pm 0.58; \text{ p value } 0.44)$ and $(4.43 \pm 0.43 \text{ vs. } 4.23 \pm 0.69; \text{ p value } 0.36)$ based on Likert scale. Agreement on contents covered, teaching strategies and education environment was satisfactory in both sessions, whereas students' self-perception of learning was more satisfactory in 1st online session. Qualitative analysis of transcribed data supported the statistical trends.

The e-learning is very effective for students of diverse educational background. However, deficient prior knowledge leads to depreciated self-learning perception. It is recommended to explore this domain by all stake-holders.



E-learning PP1F002

What's Up and What's Down for WhatsApp in Medical Education

Noor-i-Kiran Naeem Aziz Fatima Medical College

The study aimed to explore the perceptions and experiences for using WhatsApp for learning. Qualitative Exploratory Study with 16 participants from postgraduate program of Masters in Medical Education.Participants underwent Individual face to face interviews. Data was transcribed and analysed into themes and subthemes.

Participants agreed on using WhatsApp due to its ubiquitous nature, serving as a medium for information sharing and communicating with each other.

WhatsApp can be a useful tool for medical education and serves in a variety of purposes.



E-learning PP1F003

Assessing The Effectiveness of Online Asynchronous Forensic Medicine Course in Learning of Undergraduate Medical Students

Noor ul ain Riphah International University

Online asynchronous learning is gaining momentum in medical education. When Covid-19 pandemic resolves, transformative changes are expected through use of emergent technology. This research strengthens quality of learning. Objective is to assess the effectiveness of online asynchronous on learning achievement and to explore their learning experiences in Forensic Medicine course.

An explanatory sequential mixed method design will be used, with quantitative true experiment and qualitative exploration of opinion of medical students about their learning in online asynchronous course. Students (102) from 3rd year, with 51 students in each group by randomized sampling. A pre-test consisting of 15MCQs and 2SAQs will be taken from both groups at the beginning. Group(A) students will be taught through online asynchronous modality and group(B) students through online synchronous modality. After completion of course, post-test will be taken. Qualitative data will be collected through semi-structured interviews after stratified random sampling form results of intervention and transcribed.

Result: not applicable

Suggestions will be made to include asynchronous course in curriculum and promote self-regulation and quality learning in medical students, considering the drastic shift to online learning after COVID-19.



E-learning PP1F004

Perception of Post Graduates Learners On Their Professional Development During Covid-19 Online Education

Saira Waqqar, Sumaiyah Obaid, Aruba saeed Riphah college of Rehabilitation Sciences

With COVID-19 pandemic, almost 80% student's educational activities have been suffered worldwide. As a consequence, patient interactions were minimized for postgraduate cardiopulmonary physical therapy learners due to shift on E-learning. The study aims to assess the online education impact on professional development among final year CPPT post graduate students.

A descriptive qualitative study (Cases) was conducted from 16th October to 7th November, 2020 at Riphah International University Islamabad. A total of 9 participants from final year of Master in Cardiopulmonary Physical Therapy participated in focus group interviews. The data was recorded and collected through group interviews of 15 to 20 minutes each. A total of 5 open ended question were drafted to encase the general perception of E-learning related to professional development. The Codes and thematic analysis was done through Atlas ti. Version8.

Analysis of the interviews showed participants' level of satisfaction and concern regarding practical insufficiency. Participants reported a number of technical, teaching, practical and personal barriers along with positive aspects of E-leaning affecting their professional development. Participant's satisfaction regarding their hands- on skills and attitude development was compromised. Apart of E-learning impact on professional development participants gave their feedback need to improve practical and technical outcomes and ensure professional competence.

Adapting new change in learning skills related to professionalism will take time in web based environment. It is mandatory to train students via e-simulation for professional skills and attitude development.



E-learning PP1F005

The Description of Screen Time and Dry Eye Symptoms in Students During The Covid-19 Pandemic

Gita Yustika, A. M. Faisal Ansar, M Yusuf izzati, Ulfah Rimayanti UIN Alauddin Makassar, Indonesia

The number of screen time in individuals is increasing each day especially during this pandemic. Screen time decreases the number of eye blinks, evaporation of tears, and subsequently to dry eye disease. To obtain descriptions of the duration of screen time and dry eye symptoms in medical students during pandemic.

This is a descriptive research. The research subjects were medical students of UIN Alauddin Makassar. The data were collected through a questionnaire containing subjects' activities using gadgets per day and the OSDI index to assess dry eye symptoms.

Most of the subjects are 18 years old and female. The subjects average of screen time for online class is 10.27 hours per day, average screen time of other activity is 4.71 hours per day and the average total of screen time is 7.5 hours per day. In this study 10 subjects (9%) experienced mild dry eye symptoms, 28 subjects (24%) experienced moderate dry eye symptoms, and 78 subjects (67%) experienced severe dry eye symptoms.

Conclusion: It was found that average of screen time of the subjects was 7.5 hours and according to OSDI index, most subjects (67%) experienced severe dry eye symptoms.



E-learning PP1F006

Challenges to Online Medical Education During The Covid-19 Pandemic In Medical Colleges Of Lahore, Pakistan

Hamyel Tahir, Hamyel Tahir, Dr Qudsia Umaira Khan, Danyal Faisal CMH Lahore Medical College and Institute of Dentistry

The Covid-19 pandemic has forced the education sector of every country to adopt a relatively unconventional method of teaching i.e. Online Education. However, it faces many challenges of its own. Hence this research aims to discuss the CHALLENGES TO ONLINE MEDICAL EDUCATION DURING COVID-19 PANDEMIC IN MEDICAL COLLEGES OF LAHORE.

A cross-sectional type of qualitative study was conducted on the students of medical colleges in Lahore, Pakistan. The duration of study was from October through mid-December, 2020. A self-administered online questionnaire using Google Forms® was used in our research. Students from all five years of MBBS were included as subjects irrespective of their gender. The survey contained an introductory paragraph that briefed the subjects about our study's aim and the confidentiality policy. All the questions included in the survey were compulsory. The web-link for the questionnaire was forwarded to the subjects via different social media platforms.

Results of our survey showed that majority of subjects preferred face-to-face learning (70.9%) before Covid-19 pandemic and had beginner level online exposure (60.6%). Overall 85.8% of participants found the impact of shifting to online learning as negative. A variety of challenges were faced by the students with decreased attention span being most common followed by problem in communication and taking assessment exams. Switching to online education system had a significant strain on subjects' mental health. Only 32.3% subjects were willing to integrate online experience garnered during this pandemic into practice, 42.5% disagreed to this while 25.2% were indifferent about it.

Covid-19 related lockdown lead to new culture of education. Medical students had difficult time adapting to this but a faction of student wanted to use and discover online learning more.



E-learning PP1F007

Nonverbal Communication: Impact of Kinesics on Student's Learning and Learning Environment

Taliya Sajjad, Humaira Fayyaz Riphah International University

Introduction: Non-verbal communication or body language is defined as behavior of the face, body, or voice. Medical educators are unaware of the usefulness of non-verbal communication as an instructional strategy used to engage learners and to motivate them. Body language can significantly impact the learning experiences of students in class.

Theoretical Framework: Social Learning theory holds observation and modeling as the key characteristics in learning process. The locus of learning in this framework is on the interaction between the individuals, the learning environment, and the desired behavior. Social Learning Theory highlights the importance of body language in promoting a positive learning environment for the students. Humanistic approach also highlights the importance of using non-verbal communication skills as the way by which students achieve their learning purposes since they are influenced by the actions of their teachers they connect to through their own experiences. Thus, impacting their learning and internal motivation.

Methodology: A mixed method study with an explanatory sequential design. A multi-institutional study, including the medical and dental colleges of Islamabad. The duration of the study will be 6 months. The study will take place in two phases, where phase 1 will consist of a survey using a questionnaire as a tool. Phase 2 will comprise of interviews with the students. Convenience Sampling technique will be employed for phase 1, phase 2 will consist of Purposive sampling technique. Data will be analyzed statistically for phase1 whereas thematic analysis will be done in phase 2.

This study will produce awareness among medical educators to effectively use non-verbal communication as an instructional strategy to encourage an inducive learning environment and increase student's internal motivation to learn.



E-learning PP1F008

Perception Of Medical Student On Learning Methods In Pandemic Era: A Qualitative Study

Evita Sarah Nasution, Siti Khodijah Nur'Aini Jusuf & Nur Azizah Alauddin Islamic State University Makassar, Indonesia

Responding to the accelerating spread of COVID-19, teaching and learning have been moved from face-to-face to online mode. The impact of this change has not yet been clear. This study is to assess Indonesian medical student's perception on three different learning methods that they have experienced: online, offline, and blended.

This was a qualitative study involving six medical student participants, chosen purposively from those admitted into the university from 2017 to 2019. Data collection was done through semi-structured interviews using Zoom video conference. Interviews lasted for approximately 12 minutes each. Consent was sought from each participant prior to the interviews. Interview results were transcribed verbatim, then analyzed with a thematic analysis. Participant confidentiality and voluntary participation were reassured throughout the data collection, analysis, and report writing.

Participants involved were 2 males and 4 females with age range is19 to 21. It was found that most students preferred blended learning. Students highlighted that online learning gave them flexibility in terms of the class schedule and more time to learn outside the class time as compared to offline class. However, students were aware that online delivery was not ideal for all situation. They felt that online learning was not optimal for practicum and clinical skills laboratory as it does not allow hands-on experience.

It can be concluded that online and offline classes can enhance each other to maximize the learning output. Therefore, students hope that mixed learning can be applied.



E-learning PP1F009

Student Perception in Social Constructivist Learning Environment in Orthopedic Online Course in the Time of COVID-19

Sitthiphong Suwannaphisit Faculty of Medicine, Prince of Songkla University

Medical education in this era has disturbed by the coronavirus disease 2019. The online format seems to be more advantageous in terms of content material and virtual activities. The aim is to evaluate 5th year medical students' expectations for orthopedic online learning environment in the Time of COVID-19.

A cross-sectional survey was carried out among the fifth years of medical students' perceptions on the SCLE of orthopedic online course during COVID-19 widespread using the Constructivist Online Learning Environment Survey (COLLES). All students were response to preferred COLLES before starting online course. Actual COLLES was fulfilled when complete the online course.

The fifth year of medical students (n = 126) were studied in orthopedic online course. 125 students completed the preferred COLLES while the actual COLLES was replied by 120 medical students. The comparison between the preferred and the actual scores showed that the students were satisfied with e-learning. Overall, in each aspect of SCLE in the post-course is significant is raised significant than pre-course. The median score for "tutor support" was the most improvement at the end of the orthopedic online course.

To continuing education of health professionals in coronavirus19 era, the online learning formats developed based on the SCT should be used.



E-learning PP1F010

Academic Failure – Predict Early to Prevent

Azhar Rashid, Rahila Yasmeen Riphah International University

To study medicine is a challenging path. Stress, anxiety, depression percentage is high among undergraduate medical students. It varies from 30% to 50% (Haldorsen, 2014; Moutinho, 2017). Most of the medical students graduate, but on the average 10% (Bennion, 2018) do not do well and fail in academics.

Qualitative; Exploratory Study: Setting: Islamic International Medical College (IIMC) Duration of Study: 6 Months Sample Size: Academic Failure – 4th & 5th year n = 08 (One to one semi-structured interviews). Top students, 04 each from 4th & 5th year, n = 08 FGDs Teachers n = 08 FGDs. Sampling Technique: Purposeful sampling Data Analysis Procedure: Thematic Analysis

To explore the critical and noncritical factors and sign and symptoms which can predict the potential academic failure in undergraduate medical students before the first major assessment. To develop a framework to predict and detect potential academic failure before the first major assessment to help and counsel medical students to save them from long term implications.

Academic failure has serious negative impact on the student, guardians and the institution in psychological, financial and repute domains (Bennion, 2018). Early detection through framework will salvage the students, guardians



Poster Presentation 2: Medical Education Research-1 PP1G001

Medical Students' Mental Health: A Narrative Review

Maria Khan , Emaan Farhan, Samar Zaki, Murad Aga Khan University

The mental health issues in medical students is an area of great concern in medical education. Medical students are at increased risk due to their arduous training, demanding roles, and challenging situations. This review aims to sketch the first-ever holistic picture of medical student's mental health in Pakistan.

We consolidate findings from 80 articles from current literature (2019-2020) from three search engines: PubMed, Google Scholar and PakMediNet. Themes were identified from all articles, information was extracted for each and included in the review.

We identify 5 mental health problems (suicide, stress, depression, anxiety, burnout) and 11 associated/contributing mental health factors (sleep, physical activity, diet, social support, coping mechanisms, psychological well-being, technology, physical appearance, anger, violence, COVID-19 pandemic) from our review of literature. We also assess medical students' attitudes towards mental health, as it may differ from the general public because of different exposure, and possibly affect their healthcare-seeking behavior. Lastly, we identify important knowledge gaps and briefly describe the landscape of medical students' mental health research in Pakistan.

We suggest interventions to combat this mental health challenge on the personal and institutional level and suggest ways to bridge knowledge gaps.



Medical Education Research-1 PP1G002

Teacher's Opinion Towards Moodle Based MCQS Assessment Of The Undergraduate Medical Students In Covid Era

Muhammad Imran Haider, Adnan Jehangir Riphah International University

The purpose of the study was to assess teacher's opinions towards the student's online assessment utilizing MCQ-Moodle quizzes tool, so that this modality can be opted for future practice in place of or in addition to the conventional assessment paper-based methods. Teachers opinion about the method's merits, demerits and authenticity

It was a cross sectional quantitative survey using proforma which was validated by 5 experts (MHPE certified). Questionnaire was made on and distributed to the teaching faculty of IIMC involved in teaching and assessment through a link of google documents and the data analyzed.

Response rate was 86% (43/50). 42% of the teachers strongly agreed that it reduced the administrative burden. 73 % found it to be easier and quicker for examination conduction. 68 ?It that it saved their time and was cost effective. 62 ?It technological glitches-information lost/ internet problems and nearly 66?It the need to hire a technical expert. 52 ?It that this was insecure in terms of items leakage. 33 ?It that method was not credible and cheating was high and 75 % agreed on shuffling of MCQs along with the sequence of answers.

Online assessment reduced administrative burden, was cost effective but the cheating could not be ruled out. The future direction is conducting and evaluating online assessments for psychomotor and affective domains.



Medical Education Research-1 PP1G003

Literature Review for Identification of Threshold Concepts in MHPE

Attia Sheikh CMH Multan Institute of Medical Sciences

This literature review aims to outline the most relevant work done in recognition and establishment of the presence and importance of threshold concepts within a discipline. The idea is to establish a ground for identification of threshold concepts in health professions education, at the postgraduate Master's Program level.

The two most commonly searched databases PubMed and ERIC were chosen for the literature search. To further explore two search engines were also utilized: • Google Scholar - for an overview of any grey literature and mostly to find if full access was available for some important articles • Semantic Scholar – to make links in all published literature and to create a snowball effect

PubMed not only narrowed down the search into a readily reviewable number but also helped extract the most relevant researches done in this field. Boolean operators helped to expand the results and confirm if there could be any related studies not showing up otherwise. All 1,758 results found from the last 5 years' search, with the keyword "threshold Concepts" were reviewed (titles and abstracts only) and found only 33 most relevant. Subsequent searches with narrowing down the number of results came up with the same articles/studies which were all included in the original 1758.

Some of the earlier studies into threshold concepts revealed a lack of information as to how threshold concepts were identified, later research is becoming more comprehensive and thorough.



Medical Education Research-1 PP1G004

Communication Coaching of Surgical Residents Via Case Based and Family Centered Practice to Enhance Communication Competency

Maryam Barkat Rawalpindi Medical University

Surgery where the main focus on acquiring surgical skill. Therefore, communication skill may not be priority and residents feel ill prepared and no formal communication training. Aim of study is to determine the impact of communication coaching via CBD and family centered practice on the surgical resident's communication.

Study Design: Quantitative True Experiment Setting: Surgical Department Holy Family Hospital, Rawalpindi Duration of Study: 6 Months Sample Size: 30 Surgical Residents Sampling Technique: Random Sampling Sample Selection: Inclusion Criteria: Surgical residents of FCPS/MS General Surgery and Allied. Exclusion Criteria: Final year Residents of MS/General Surgery and allied who training will be completed in 4-6 months. Data Collection Procedure 10 important surgical topics select. Pre and post assessment through communication assessment tool will be done by trained examiner. 30 surgical residents will be randomly allocated to two intervention group CBD AND FCP. 360 feedback before and after the task

Data analysis will be done through SPSS 20. Categorical variables will be presented in percentages, whereas, continuous variables will be presented as mean and standard deviations. An independent t sample test will be used for group comparison. Chi-square test will be used for any association. The P valve < 0.05 will be considered as significance The family centered practice is better instructional method to enhance the communication

of surgical residents and it should be included as part of the curriculum



Medical Education Research-1 PP1G005

Challenges and Experiences Faced by MHPE Graduates During Their First Year of Post-Graduation: A Narrative Inquiry

Farzana Fatima, Rehan Khan Riphah International University

The growing expectations of regulatory bodies for medical educators have motivated teachers to opt for MHPE. The professionalization of medical education has led to the role of this field. Exploring the challenges / experiences faced during the first year of work will help future graduates to effectively overcome these problems

All MHPE graduates with an email address will be invited to participate in a semi-structured & in depth interviews. Interviews will be completed in-person or via telephone or video conference, detailed notes and audio recordings will be collected for analysis

METHODOLOGY / STUDY DESIGN: qualitative study: a narrative inquiry DURATION OF STUDY: 6 months January 2020 to June 2020 SAMPLE SIZE:5-6 graduates of MHPE working in private & public medical institutes of Pakistan. SAMPLING TECHNIQUE: convenience sampling SAMPLE SELECTION: Inclusion criteria: Participants must have MHPE qualification DATA COLLECTION PROCEDURE: Using convenience sampling, all graduates with an email address will be invited to participate in a semi-structured & in depth interviews. Interviews will be completed in-person or via telephone or video conference; interviewer will collect detailed notes and audio recordings for data analysis.

Exploring challenges/experiences will help future graduates and institutes to formulate various programs to facilitate the medical educationists to consider the potential challenges and opportunities associated with work & work places.



Medical Education Research-1 PP1G006

Online Mentoring: Challenges and Strategies

Sadiq Jan, Usman Mahboob Riphah International University

Mentoring revolves around interacting with the participants and building significant relationships that usually fill a substantial void in the life of a young person. The online mentoring program makes such interactions difficult and compromised. The objective is: "To explore the challenges and strategies for online mentoring"

The study design will be a qualitative exploratory study. The study duration will be 6 months at Islamic international medical college. The sampling technique will be random purposive. Sample size: 12-15. Inclusion criteria: teachers of minimum 1-year experience of mentoring. Exclusion criteria: those who don't have online mentoring experience

Data collection tool: semi-structured questionnaire. Determining the scope and purpose of the study identifying participants considering ethical issues planning logistical aspects developing the interview guide establishing trust and rapport conducting the interview memoing and reflection analyzing the data (thematic analysis) demonstrating the trustworthiness of the research. presenting findings in a paper or report.

It can help students to overcome feelings of isolation through personal contact and access to a wide variety of mentors e-mentoring provides flexibility to those who would normally face barriers.



Medical Education Research-1 PP1G007

Improving Gender Equity in Health Professions Education- An Exploratory Qualitative Study

Rabia Hanif, Rahila Yasmin, D.Shabana Riphah International University

Health Professions Education is a rapidly evolving field, with increasing number of women entering the field. Despite more females choosing medical education as a career, women remain under representated and are not acquiring leadership positions. Factors such as unequal career opportunities, gender impervious institutional policies and gender discrimination in recruitment contribute to

Gender Equity and women empowerment have been set by the united Nations as unique goals on the 2030 charter towards sustainable development, various aspects of gender equity need indepth exploration at the level of health professionals other than physicians. This study hence would include the health professional educationists who are at leadership positions. The objectives of this study would be to identify the viewpoints held by HPE's on different aspects of Gender In quities faces by them, at all the levels. theoretical framework includes, feminist theory, occupational identity formation and professional identity formation. Male and Female HPE'S, both will be the study sample to observe Gender Equity. A Qualitative, Exploratory study using Grounded theory as methodological framework. study duration is 6 months, study setting includes HPE's working at various medical and dental Institutes of Pakistan. The sampling technique is purposive sampling. Inclusion criteria for this study is HPE's at leadership positions, chair leads, committee heads, having more than 5 years of work experience. Exclusion Criteria are under graduate and post graduate students, Recent MHPE Graduates. Semi structured, indepth interviews will be conducted, till achievement of saturation. the interviews will be recorded for in depth analysis after consent from study participants. Open axial coding, use of Atlas ti as Data Management software. Review of findings.

Results of this study will be used to formulate a set of recommendations that would include interventions at various levels, to address and improve Gender Equity in Health Professions Education.



Medical Education Research-1 PP1G008

Exploring The Factors Affecting Professional Identity Formation Of Medical Teachers In An Online Education Environment

Fatima Ali Riphah International University

Professional identity(PI) of teachers is fundamental for teaching quality and effectiveness. The aim of this study is to identify the factors that impact the professional identity of medical teachers in an online educational environment. The identified factors will be utilized for developing a framework for faculty development programs.

An exploratory qualitative study will be conducted at Islamic international medical college. Focus group discussions and in depth interviews will be taken from undergraduate medical teachers that have an experience of both face to face and online teaching. Relevant themes will be identified by the researcher for data analysis, quality will be ensured by triangulation and member checking. Identified factors will be used for forming a framework for faculty development programs.

Result: N/A

It will help in formulation of faculty development programs enhancing quality and effectiveness of online medical education.



Medical Education Research-1 PP1G009

Nudging to improve: Impact of nudges on students' progress and academic performance

Fahad Azam , Abida Shaheen, Afrose Liaquat Shifa College of Medicine

Nudge is a concept in behavioral sciences which uses positive reinforcement to improve attitude and behavior of individuals. Aim of this study was to repeatedly nudge students who scored below average in summative assessment of a module and track their progress using multiple online formative assessments in the next module.

We identified thirty-eight students after summative assessment of a module (Essentials of Medicine) who scored less than mean score of the class. Out of these, nineteen students volunteered to participate. We sent multiple nudges were to these students using social media during another integrated cardiovascular module (CVS) and monitored their progress with the help of multiple online formative assessments. At the end of the CVS module, we analyzed summative scores of these students before and after nudging and compared with scores of the rest of the class.

Mean summative score of the study participants at the end of EOM module was significantly less than summative scores of the rest of the class (64.53±4.16 vs 75.44±7.74; p<0.001) After sending multiple nudges and giving feedback on performance in multiple online formative assessments, mean score of the participants at the end of the second module improved in comparison to rest of the class (74.34±4.45 vs 76.26±6.95; p=0.89). There was significant improvement in the overall score, MCQs score and attendance of students who were frequently nudged and assessed throughout the second module.

Nudging is an effective approach to monitor progress and can motivate students to put more efforts into their studies to identify their weaknesses and improve academic performance.



Medical Education Research-1 PP1G010

Whats Up and Whats Down for WhatsApp in Medical Education

Noor-i-Kiran Naeem Aziz Fatima Medical College

The study aimed to explore the perceptions and experiences for using WhatsApp for learning Qualitative Exploratory Study with 16 participants from postgraduate program of Masters in Medical Education. Participants underwent Individual face to face interviews. Data was transcribed and analyzed into themes and subthemes.

Participants agreed on using WhatsApp due to its ubiquitous nature, serving as a medium for information sharing and communicating with each other.

WhatsApp can be a useful tool for medical education and serves in a variety of purposes.



Poster Presentation 3: Medical Education Research-2 PP2F001

Pediatric Palliative Care: Needs Assessment for Undergraduate Medical and Nursing Education

Kan Yin Wong, Wai Tak Victor Li, Pui Yu Yiu, Tsz Kiu Tong, On Hang Ching, Lok Yin Leung
The University of Hong Kong

Paediatric palliative care (PPC) is in its nascent stages despite being an essential component of paediatrics. With its growing importance, the expertise, emotional-coping and communication skills of healthcare professionals have been challenged. This cross-sectional study reveals PPC-related knowledge, attitude and educational needs of medical and nursing students in Hong Kong.

A pretested expert-reviewed survey containing 44 items from 11 categories was conducted to determine respondents' understanding of and perceptions towards PPC. Medical and nursing students without extensive clinical experience were recruited between February and March 2019 by convenience sampling at the Faculty of Medicine, University of Hong Kong. The chi-square test, Fisher's exact test, and descriptive statistics were used to analyse the data.

Although only 38% of the 241 students who completed the questionnaires had heard about PPC, more than two-thirds supported developing PPC locally, believing that spending time to care for dying children is worthwhile and self-rewarding. They generally misunderstood the associated fundamental principles and pain assessments. More medical than nursing participants recognised PPC's multidisciplinary nature, but felt less mentally prepared to discuss death and dying. 86% of respondents from both programmes advocated the inclusion of PPC in their curricula. Most indicated that PPC services should be delivered at home, and the decisions should be made by parents instead of children.

The majority of participants were supportive of PPC despite limited educational and public exposure. The findings suggested that a comprehensive PPC education including a range of topics is required.



Medical Education Research-2 PP2F002

Procrastination in Medical Teachers – An Unexplored Phenomenon

Syed Muhammad Ali, Muhammad Al Riphah International University

Procrastination, the act of willful delay in doing a task with knowledge of bad consequences has always been attributed as a trait of students, leads to drastic effects on academic progress. The study aims to explore the phenomenon in medical teachers and its implications on their practices.

The proposed exploratory study based on the theoretical framework of Banduras Social Cognitive Theory will be conducted in the private and public sector medical teaching institutions, accredited by the primary medical licensing body of Pakistan involving structured interviews of the medical teachers having teaching experience of more than 05 years. The interviews, exploring the phenomenon of procrastination in teachers, their perception and the affects thereof on their teaching practices; will be recorded and transcribed. The data from the interviews will be coded. Themes will be identified and analysis of the results will be done using Atlas.ti software for further discussion.

Result: N/A

The pioneer work in exploring currently unexplored phenomenon of procrastination in medical teachers by taking it into account from a new perspective, adding to our knowledge and improving teaching practices.



Medical Education Research-2 PP2F003

Students' Perceptions of Online Physiology Lab Work in Nervous and Musculoskeletal Systems Block

Miranti Dewi Pramaningtyas, Titis Nurmasitoh, Rokhima Lusiantari, Ernadita Budiastuti Universitas Islam Indonesia

The pandemic situation that has been taking place in Indonesia has brought several changes to the learning process. Lab work is one of the online lessons that medical faculty students must go through. The purpose of this study was to determine students' perceptions of online lab work implementation.

This study was an observational study with a cross-sectional design. The number of samples in this study was all students who took the physiology lab work in nervous and musculoskeletal systems block. Data obtained from the lab work evaluation online questionnaire. The evaluation includes manuals, lab work videos, practical explanation slides, and case assignments. Descriptive data analysis was performed. Qualitative data were analyzed thematically.

A total of 169 students filled out an online questionnaire. In terms of preparation, 96.45% of students watched lab work videos, 95.86% read manuals, 95.27% read practical explanation slides, and 76.92% prepared discussion of assignment cases. Overall, 95.11% of students felt that the material distributed before lab work was beneficial in understanding the lab work. Students who were satisfied with online lab work were 62.72% and 37.28% were not satisfied. Most students felt that online lab work runs smoothly and helps them understand the material. Lack of practice opportunities and unstable internet signals are obstacles in online lab work.

The majority of students' perceptions about the satisfaction of the implementation of online physiology lab work felt satisfied and considered that online practicum supported understanding of the material in blocks.



Medical Education Research-2 PP2F004

Online Learning On Medical Students, Challenges and Strategies: Cross-Sectional Study In The UAE

Farwa Kazmi, Priyadarshini Ray Gulf Medical University

Owing to the Covid-19 pandemic, medical institutions adopted online learning. However, it presented with challenges including technical issues, and feeling overburdened. The objective was to assess the challenges faced by medical students with online learning. This would help medical institutions to calibrate their online learning environment and improve learning experience.

This cross-sectional study was conducted among 98 students from Gulf Medical University in Ajman, UAE. Students included were from: first till fourth year; 18 years or older; of all genders and nationalities; who accepted to participate in the study. Convenience sampling technique was utilized to recruit participants. After receiving the IRB approval, the questionnaire was sent to participants through Google forms. The collected data was stored in a Google Spreadsheet. SPSS version 27 was used to analyze the data. The data was presented in descriptive statistics to assess the effects of online education on medical students.

According to the responses, challenges faced by medical students included: feeling overburdened by increased numbers of online notes and assignments (77.6%); getting distracted during discussions/lessons due to background noises (75.5%); facing connectivity issues during online sessions or assessments (71.4%); experiencing health issues such as headaches, vision problems because of increased use of digital devices (66.3%); experiencing technical issues with device, browser or software during online sessions or assessments (66.3%); feeling uncomfortable with turning on camera from home (66.3%); lacking motivation to study due to a lack of face-to-face interaction (66.3%); device shutting down unexpectedly during online sessions or assessments (52%).

Significant issues were faced by students during online learning. Studies should be conducted on a larger scale to find more practical solutions which can be implemented.



Medical Education Research-2 PP2F005

Exploring The Utilization and Effectiveness of Self- Directed Learning (Sdl) Among Medical Students In Achieving Learning Goals

Alishba Mukhtar Islamic International Medical college

SDL sessions are being conducted in medical colleges as students are perceived to be able to apply the principles of adult learning in their studies. However, the student's perception on SDL needs to be explored especially in the local context, where the student is coming to medical college after

Qualitative exploratory study was conducted to understand the perceptions and experiences of medical students regarding their self-directed learning. Two face to face interviews were conducted and rest were conducted via zoom as institutes were closed due to COVID-19. Interviews were based on 11 open ended questions, constructed after extensive literature search. These questions were validated by 5 medical educationists and modified accordingly. Data was analyzed thematically and atlist is software was used for this purpose.

Open and axial codes were identified, and themes were developed after analyzing the data extensively. Themes like: extrinsic motivation has more power, external regulation is needed, difficulty in goal setting, students lack skills required for SDL, guidance from teachers is required during SDL sessions, peers have a positive role in motivation and boasting self-efficacy, SDL is better accomplished in a comfortable environment and modification in SDL s can help students focus better, were generated.

It was noted that students needed guidance despite being considered as adults. Thus, there should be structured guidance for the students and curriculum reforms are needed to facilitate students in



Medical Education Research-2 PP2F006

Consequences of Covid-19 Pandemic On Sleep, Psychological Immunity, And Wellbeing; Synchronized Lifestyle Modification A Journey Of Hope

Samia Khalid, Shagufta Feroz, Dr. Mujtaba Riphah International University

Due to unhealthy lifestyle during pandemic Pakistani people facing the challenges of malnutrition, unhealthy food, and diet, physical and mental illness. Synchronized Life-style modification plan (SLP) is an evidence-based exercise of serving individuals and their families to follow healthy behaviors that enhance health, sleep, manage stress, and value of life.

Survey research design and nonprobability purposive sampling technique were used. With APA ethical Consideration, online data was collected from 394 University Students and Employees from different cities of Pakistan. It was hypothesized that there would be a significant relationship between Synchronized Lifestyle Modification, Insomnia, psychological immunity, and wellbeing.

Results concluded that Synchronized Lifestyle Modification has a significant negative relationship with Insomnia but a significant positive relationship with Psychological Immunity and Well-being. Another hypothesis indicated that Synchronized Lifestyle Modification will moderate the relationship between Insomnia, Psychological Immunity, and well-being. Results verify the importance of Synchronized Lifestyle Modification and concluded that Insomnia has a negative relation with Psychological Immunity and Well-being, this relationship will be weaker in case of a high Synchronized Lifestyle Modification plan (SLP) Practices.

A synchronized lifestyle modification plan (SLP) that was introduced by Dr.Shagufta Feroz is a comprehensive plan to improve the quality of immune system, mental and physical health.



Medical Education Research-2 PP2F007

Attributes of Effective Educational Leadership in Digital Era

Sana Iqbal Riphah International University

Today, digital transformation has changed the face of society in every aspect, especially after COVID-19. The education was transformed from traditional classrooms to more digitalized one. As educational institutes change, leadership must as well.

aims: to explore the attributes of educational leaders in medical schools and to see the impact of digital transformation on leadership. objectives: to explore the attributes of educational leaders in the digital era, to identify the impact o digital transformation on educational leadership theoretical framework: behavioral complexity theory, shared leadership, and adaptive structuration theory methodology: Qualitative exploratory study design, medical and dental institutes of Islamabad, 6 months of duration, 8 to 16 interviewees (faculty members), purposive sampling, semi-structured interviews results are not available yet, the study is still under process

To develop an understanding of the essential attributes of digital educational leadership which would help to create and sustain digital culture in medical schools and well prepare students for future



Medical Education Research-2 PP2F008

Effectiveness of Online Web-Based Illness Scripts Through Examination Results in Fifth-Year Medical Students During Orthopedic Rotation

Chirathit Anusitviwat Prince of Songkla University

The illness scripts help students to organize knowledge and contribute to improving clinical reasoning. Therefore, we initially generated online web-based illness scripts this academic year for fifth-year medical students. Additionally, we conducted this study to explore the effectiveness of these illness scripts via the examination results during orthopedic rotation. This study was conducted at the Prince of Songkla University, Thailand. All fifth-year medical students engaging in the orthopedic rotation were encouraged to perform all illness scripts. The materials were online PSU-Creating Illness Scripts Exercises. Each script contains practical orthopedic problems beginning with a clinical presentation followed by multiple-choice and short answer questions. All participants could answer each question once, and the responses were recorded. The students finishing more than 80% of scripts were assigned as the first group, while finishing below 80% were assigned to the second group. The summative examination results between the two groups were compared.

Over a 6-month period of this academic year, the mean summative examination scores from medical students are $32.67(SD\ 4.49)$ out of 50. The number of medical students in completing mostly illness scripts group is 45, with mean examination scores $33.36(SD\ 4.39)$. The number of the other group is 39, with mean examination scores $32.07(SD\ 4.54)$. There is no significant difference in scores between the two groups (p=0.189). Furthermore, making a high score in illness scripts is not related nor accelerated to high scores in examination (OR 0.124; 95% confidence interval, -0.11-3.6; p=0.286).

From 6-month data, completing current web-based illness scripts in our online course would not increase the examination scores. However, the results may change after evaluating entire students this academic year.



Medical Education Research-2 PP2F009

Evaluation of Virtual Biochemistry Practicum On First Year Students at Faculty Of Medicine Universitas Islam Indonesia

Nur Aini Djunet, Rizki Fajar Utami, Asri Hendrawati, Mujiyanto Faculty of Medicine Universitas Islam Indonesia

The Covid-19 pandemic makes learning process have to be done virtually, a new experience for students and some lecturers. Virtual biochemistry practicum (VBP) was conducted for 110 minutes for each theme. Each time VBP is carried out a pre-test (10 minutes), introductory lectures (20 minutes), students' distribution to several breakout

The research design was cross sectional using a mixed-method approach. Subjects were first-year students who took the first course and eligible (n = 172). We give code to disguise the identity of the subject. The knowledge level were taken from pre-test and post-test scores, which analyzed by Wilcoxon test. Qualitative data were taken from observation of learning records and subject comments in evaluation questionnaire. Then we analyzed thematically. About 159 subjects had a higher post-test score than pre-test. There is a difference in knowledge level (p < 0.0001) between before and after practicum. Knowledge level before practicum is 70 (30 - 90) and after that it increases to 87 (50 - 100). Generally, the online practicum runs smoothly. As many as 32% of subjects stated that they did not encounter problems, more of them complained about telecommunication signals (43%), lack of VBP time (17%), preferred the offline system (7%), and others (1%).

Virtual biochemistry practicum using teaching videos can be used as an alternative to biochemistry practicum learning methods.



Medical Education Research-2 PP2F010

Analgesia in Thoracic Surgery – Do We Know What We Don't Know?

Shriyam Patel , Karishma Chandarana, Amr Elsissi Glenfield Hospital

Effective analgesia is paramount for optimal postoperative recovery. With advancing surgical techniques, and focuses on 'enhanced recovery', updated information should be available to all multi-disciplinary team members contributing to patient care. We aimed to incorporate peer-to-peer teaching using mixed methods of delivery, to enhance knowledge of thoracic analgesic techniques.

We sought to analyse existing knowledge of doctors and allied healthcare professionals by conducting an online questionnaire into knowledge on basic sciences, clinical care and hospital policies surrounding thoracic analgesic techniques. Results were used to objectively ascertain where gaps in knowledge lie, and identify targeted learning objectives and preferences for teaching methods and delivery. Members from each discipline contributed towards the creation of 'quick reference guides', outlining educational points from a multidisciplinary perspective to aid pain management throughout the patient journey. Interactive virtual teaching sessions helped to contextualize relevant information, encourage discussion and clarify any existing confusion on the topic.

A total of 32 individuals completed the questionnaire. 25% of respondents were doctors, and 75% 'allied healthcare professionals' consisting of nurses, healthcare assistants, pharmacists, physiotherapists and operational departmental practitioners. There was no significant statistical difference between doctors and allied healthcare professionals on their baseline knowledge of thoracic analgesic techniques, and no difference in the category of questions (p>0.05). 94% of participants were not completely confident in their knowledge of thoracic analgesia, with 97% of participants expressing a need for further teaching. A follow up questionnaire after intervention revealed greater subjective confidence in managing patients and preparedness for associated complications.

Interdisciplinary teaching is an invaluable means of medical education, to ensure well-rounded health care professionals. Establishment of easily accessible learning aids for staff is imperative, particularly during the covid-19 pandemic



Medical Education Research-2 PP2F011

Quantifying the Borderline Candidate in Standard Setting

McLachlan , J.C., Robertson, K.A., Weller, B., University of Central Lancashire

Conceptualising the borderline candidate is one of the most difficult tasks in standard setting. However, it is also central to the process. Here we set out to develop a methodology by which the score of borderline candidates can be retrospectively calculated from the Facility of assessment items.

We identified Borderline candidates by reviewing their performance across all assessments in an academic year in one medical school. We plotted the item scores of the Borderline candidates in comparison with Facility for the whole cohort and fitted curves to the resulting distributions. A variety of criteria for classifying candidates as Borderline were explored.

We observed a strong curvilinear relationship between Borderline candidates and the whole cohort. This relationship was well described by an exponential of the form y? C.e(Fx) where y is the Facility of Borderline candidates on that Item, x is the observed Item Facility of the whole cohort, and C and F are constants. We found C and F had similar values under different conditions. Using the typical values for C and F and the observed cohort facility, we could predict the probable Facility for Borderline candidates over the test, in other words, the cut score for Borderline candidates.

This approach can be used to standard-set assessments (like Cohen methods) or to correct the estimated Angoff scores of individual items retrospectively, where they differ markedly from observed Facility.



Poster Presentation 4: Medical Education Research-3 OP2G001

Development of Urdu Spondee Words List

Tehreem Ijaz Riphah International University

Spondee words are bi-syllabic, equally stressed, homogeneous words which are used to measure speech recognition threshold(SRT). The objective of the present study was to develop Urdu spondee words list for establishment of speech recognition threshold for hearing impaired population.

The study was a descriptive study and it was conducted in a time duration of 6 months in Rawalpindi and Islamabad Region. The list of 18 bi-syllabic words were formed, these bi-syllabic Urdu compound words passed through variety of steps before final version. Firstly, bi-syllabic words are chosen from different resources. Secondly equally stressed syllables are analyzed subjectively by Speech language pathologists and audiologists. Then Moraic weights allocation according to URDU language, and familiarity judgement was being done. Finally, the homogeneous audibility was analyzed by PRATT software by allocating the intensities in dB.

The results revealed that the final selected list of 18 spondee words had equally stressed syllables, with the accomplishment of the criteria of familiarity judgment for the participants. The recorded list shows minimum and maximum intensity variation of 3db to 8db in the homogenous audibility of the words.

It is concluded from the present study that spondee words list can used for establishment of SRT for the hearing impaired population. It will also benefit cochlear implanted population as well.



Medical Education Research-3 OP2G002

The Use of Watershed Segmentation and Otsu Thresholding to Determine Nsclc Position and Size from Ct Scan

Mohtar Yunianto, Suparmi, Tonang Dwi Ardyanto Physics Department, Sebelas Maret University, Indonesia

Lung cancer is the most dangerous cancer. The number of lung cancer sufferers in the world will increase by 38% to 2.89 million by 2030. Non-Small Cell Lung Cancer (NSCLC) is a common cancer accounting for about 80% of all cases. Objectives How we can determine NSCLC position and size?

We identified 22 NSCLC CT scan images in DICOM format obtained from TCIA database. The average age of patients was 64 with 13 males and 9 females. The database was downloaded through NBIA Data Retriever and converted in .png using 3DSlicer 4.11. MATLAB R2018a was used in developing this application. The image processing began with converting it to gray. Binerization was determined by Otsu Tresholding while the boundary of the image surface was determined by binary complement. The image segmentation process used watershed and line watershed to determine the cancer position and size which consisted of area, circumference and diameter.

22 NSCLC images were identified with an application that has been made with an accuracy level of 91%, with 2 positions in the right upper lobe, 4 in the right middle lobe, 2 in the right lower lobe, 7 in the left upper lobe, 2 in the left lower lobe and 2 in the left hilum. Those 20 cancer cell positions were in accordance with the information obtained from the dataset. However, there were 2 cancer cells that did not match. This application also managed to calculate the area, circumference and diameter in pixel

The application has been successfully made to determine NSCLC position and size from TCIA database. Further research is expected to detect types of SCLC and other types of cancer.



Medical Education Research-3 OP2G003

Anxiety Levels Due to Covid-19: Comparison Between Medical and Non-Medical Students

Natasha Nadeem, Izzah Baig, Javeria Ilyas, Fareha Azam, Farhat Ijaz, Haroon Rashid, Rana Khurram Aftab

CMH Lahore Medical College and Institute of Dentistry

Due to the COVID-19 pandemic, undergraduate students have undergone a greater negative impact on their mental health leading to symptoms of anxiety, further exacerbated with the newly introduced system of online studies and exams. The objective was to assess and compare the anxiety levels in undergraduate medical and non-medical students.

We conducted a cross sectional study in June, 2020 on undergraduate students through the administration of an online survey. A questionnaire consisting of demographic information and the Generalized Anxiety Disorder Scale-7 (GAD-7) was completed by 385 participants over a period of three weeks. Chi-squared test was applied on the data which was analyzed by using SPSS Version 25.0. P-value of less than 0.05 was taken as significant.

Out of 385 participants, 73% of respondents were medical students and 27% were non-medical students. Non-medical students had a higher mean anxiety score of 11.21 ± 5.77 compared to 9.36 ± 5.71 in medical students. 21.7% of medical students experienced severe anxiety, 19.6% experienced moderate anxiety, and 38.8% experienced mild anxiety. In non-medical students, 35.6% experienced severe anxiety, 20.2% experienced moderate anxiety, and 34.6% experienced mild anxiety. Results of Chi-squared test indicated a significant p-value (0.013) consistent with the anxiety levels being high in medical and non-medical students.

Our study found anxiety levels in both medial and non-medical students due to COVID-19 to be significantly high, with anxiety levels of non-medical students greater than those of medical students.



Medical Education Research-3 OP2G004

Survey of Hostel Life at A Private Medical and Dental College

Nighat Nadeem Lahore Medical and Dental College

Hostel is becoming a necessity with increasing number of students coming from peripheral areas of the country. Hostel life is not without problems, limitations and challenges. Aim: To show student satisfaction with hostel facilities and look into the issues of hostel life.

A quantitative cross-sectional survey was carried out on the students residing in the hostels of a private medical and dental college in May,2019. Among all the hostellers, 159 responded to fill the validated questionnaire, the identity of respondents was kept confidential. The instrument had open comments and close ended 16 items to which a four point Likert scale was applied:(Excellent-Poor). The questions pertained to mess food, gymnasium, security, electric supply, washroom facilities, infrastructure and room among other facilities. Data was analysed by SPSS Version 20.

The data collected at one time was analysed by SPSS Version 20 and frequencies and percentages were calculated. Infrastructure and rooms had 93-99%, mess food:67.7%, gymnasium facilities:72-882%, washroom facilities:60%, hostel security :94% and overall hostel rating was 90% positive responses.

It can be concluded that facilities provided in hostel showed satisfaction of students related with good food, 24 hours' electricity supply, medical facility and peaceful environment.



Medical Education Research-3 OP2G005

Research Workshops for Pre-Medical High School Students: A Solution for Improving Health Science Research in An Lmic

Mohammad Hassan Raza Raja, Maaha Ayub, Ronika Devi Aga Khan University

Research output in lower-middle-income countries (LMICs) is significantly lower than many developed nations. Research exposure early in an individual's education increases the likelihood of pursuing an academic career. This study aims to assess the impact and relevance of conducting research workshops tailored towards high-school students pursuing premedical education.

Five research workshops (RW), covering the basics of research methodology and conducting a research study were offered online for high-school students in Pakistan. Knowledge acquisition was monitored through pre- and post-test quizzes, and self-efficacy scores. Opinions and feedback were sought through a feedback form. A follow-up questionnaire was disseminated among participants two months following the completion of the RWs.

126 students were enrolled in the RWs. Pre- and post-test analysis revealed a statistically significant improvement (p<0.001) in test scores for all 5 RWs. Furthermore, analysis revealed statistically significant improvement (p<0.001) in all 17 self-efficacy scores, grouped into four categories. Eight out of ten organizational aspects were rated satisfactory and above by all participants. 100% of participants found the content relevant to the current level of education at a level of satisfactory or above. 70/126 attendees responded to the 2 months post-RW series follow-up survey. Amongst these, 35/70 reported involvement in medical research with faculty in academic-medical institutions

RWs were well-received by participants leading to increased research activity. RWs may prove to be an effective, sustainable strategy in boosting research output in LMICs, at a grassroot level.



Medical Education Research-3 OP2G006

Effect of Covid-19 Related Infodemic On Health of General Public of Pakistan

Azeema Noor

Covid-19 outbreak was declared "Pandemic" by WHO on 11-03-2020. There was an information overload which caused fear, anxiety and panic among people. The objectives of this study is to know public opinion regarding role of infodemic in spreading fear and assess its effect on health of general public of Pakistan.

A cross-sectional survey was conducted online from 14 july to 25 august 2020. Pakistani citizens of age >12 years were invited to participate in survey through google forms. A written consent was given to all participants before filling the survey. Data was analysed using SPSS. A total of 541 participants took part in survey of which 320(59%) were females and 221(41%) were males. 432(80%) reported that infodemic played great role in creating fear and panic among people. 310(57%) reported that infodemic created fear on them. 304(56%) reported their health was effected. 182(33%) had effect on psychological health, 17(3%) had effect on physical health, 105(20%) had effect on both psychological and physical health.

Infodemic caused by media played major role in creating fear and panic among people. Fear created by infodemic is associated with negative psychological outcomes during the Covid-19 outbreak in Pakistan.



Medical Education Research-3 OP2G007

Is Undergraduate Comprehensive OSCE Useful for Medical Students in Clinical Rotation? An Analysis, Student, and Lecturers Perceptions

Yeny Dyah Cahyaningrum, Kuswati, Dina Esti Utami, Eka Rosmarini Sariwulan, Lamya Mutia Nabila, Umatul Khoiriyah Universitas Islam Indonesia

Medical education is an integrated education at the undergraduate and clinical rotation. Undergraduate of Comprehensive OSCE is one way to see students' clinical abilities before the clinical rotation. The aims to determine the perceptions of lecturers and students, as well as a comprehensive analysis of OSCE achievements on clinical learning.

This research is a mixed method design with an explanatory approach. This research was conducted on 125 medical students. Data analysis was carried out by linear regression on the comprehensive OSCE score on the achievement of the Mini CEX, DOPS, and OSLER scores for the clinical rotation. Regression analysis was carried out at each OSCE station against the associated clinical rotation. Significance analysis was performed at a p value <0.05. At the qualitative stage, an open questionnaire was given the opinions of students and lecturers about the implementation of the Comprehensive OSCE.

The data analysis showed that there was no significant relationship between the Comprehensive OSCE scores and several clinical rotation assessments. The significance value at several stages lies in the p value: 0.05 (OSCE hematology station against Mini CEX in Pediatrics) up to p: 0.796 (Cardiology, Endocrine, Respiration, and Genitourinary OSCE stations against Mini CEX at the Internist). Students' and lecturers' perceptions of the Comprehensive OSCE are divided into the benefits of the OSCE, the OSCE's ability to assess students' clinical reasoning abilities, cases given in the OSCE, and feedback given by lecturers in implementing the Comprehensive OSCE.

Comprehensive OSCE is part of a formative assessment to strength students clinical reasoning and clinical decision making. Comprehensive OSCE can be used as a formative assessment in undergraduate medical education.



Medical Education Research-3 OP2G008

Learning Modalities Used by Medical Students: A Cross-Sectional Study

Maria Khan, Ali Bin Abdul Jabbar, Daniyal Ali Khan, Muhammad Abdullah Javed,
Muhammad Hassan Raza Raja, Kanza Muzaffar
Aga Khan University

Medical education has evolved from lecture-based teaching to students exploring resources to facilitate their own education. These resources require review to ensure accuracy of information and effectiveness. However, few studies have explored the resources students use. This study aims to outline the different learning modalities students use for medical education.

An online questionnaire, in the English language, was circulated to eleven medical colleges in Pakistan via internet platforms. Medical students in the basic sciences years (years 1, 2 and 3) were included as they gain more theoretical knowledge with less practical application.

585 responses were collected, of which 64.4% were female and 34.0% were male. The most common methods for examination preparation throughout all years were textbooks, video resources, group study, practice questions and lecture notes/slides, however, overall trends changed with time. The most popular video resources were 'Dr Najeeb' (70.9%), 'random Youtube channels' (49.6%), 'Kaplan videos' (30.6%) and 'Pathoma' (18.3%); most students used more than one resource. Video resources were useful for learning for 44.8%, reference/course books by 36.8% and review books by 8.0% of students. Problem-based learning, team-based learning and video resources were the modalities most students wanted compulsory.

Medical students prefer textbooks and video recourses for learning. Video recourses must be explored further for effectiveness. Student preferred learning methods should be researched and incorporated into medical education.



Medical Education Research-3 OP2G009

Working Towards a Sustainable Future: Tips for Implementing Sustainability in Medical Education

Janique Oudbier, Tobias Boerboom, Jan Hindrik Ravesloot, Jeanine Suurmond Amsterdam UMC

Education in sustainability prepares future health professionals to promote sustainability and to provide sustainable health, but many medical schools and educators feel unprepared to do so. This study aims to develop tips for the implementation of sustainability in medical education. This way, we can work together towards a sustainable healthy

In order to develop these tips, a narrative review was conducted. Literature from PubMed and Web of Science were used, amongst other databases and grey literature. Only studies in which the participants were students in medical domain were included. Best practices and facilitating factors regarding sustainability in medical education were collected and analyzed. Based on the findings, a list of twelve concrete tips, for effectively implementing sustainability in education, was formulated. These tips are useful for all actors in education, teachers and educational developers as well as management. The tips are very diverse, ranging from making use of existing sustainable curriculum frameworks, learning materials, and/or toolkits to making big changes with small steps.

By integrating sustainability in the medical curriculum, we can work towards a sustainable healthy future. Let yourself be inspired by these tips.



Medical Education Research-3 OP2G010

Assessing Social Intelligence of Health Professions Educationists and Its Use to Counter Challenges at Workplace

Laila Shakeel Abbasi, Rahila Yasmeen Riphah International University

Medical educators face challenges at workplace when leading the change in the existing structures. The study will aim to assess levels of social intelligence present in HPE faculty members at leadership positions in academic institutes and analyze how the individuals possessing higher level of social intelligence deal challenges at workplace.

Social intelligence is one of the significant factors that predicts human behavior in various social contexts. It is defined as the capacity to know oneself and the others. The leader with developed social intelligence can set the stage for a relationship-centered experience that shapes the work environment and affects health and well-being of those who work there. Social intelligence is directly associated with the problem-solving skills and conflict handling situations and individuals practicing Social Intelligence are less prone to work-based conflicts. Literature shows that there is a strong impact among social intelligence variables on organizational conflict management strategies.?

It is Mixed Method Study with Explanatory Sequential Design, consisting of first Quantitative phase followed by second qualitative Phase. The study will be conducted among the HPE faculty of medical and dental institutions. Tromso Social Intelligence Scale will be used to assess the levels of Social intelligence of HPE faculty members and phase 2 will have Semi structured interviews of members who possess high levels of Social intelligence. Faculty having Full time jobs in medical education for a period of more than 3 years will be included in the study. Statistical analysis and thematic coding will be done for results.

The study will describe real-life experiences of medical educators in dealing with challenges. The results can be used to design trainings for HPE programs to develop competencies of Social intelligence.



Poster Presentation 5: Medical Education Research-4 PP3F001

Improving Learning Curve in Microsurgical Teaching: A Novel Simulation Model

Karima Medjoub, Lydia Robb NHS UK

microsurgery is a complex process, and our aim is to find out whether using Hi-fidelity simulation on cadavers can make the learning faster and safer. This is not a new concept, but our aim to perform this study mixing simplification whilst maintaining realism. This is demonstrated in changing

We used fresh frozen cadavers according to our local protocols. In the first stage of the study, we used 3 upper limbs using different dye techniques. This pilot included raising several flaps. The flap harvest was performed by a senior plastic surgery trainee. The second stage: We will use of the cadavers in a course for new trainees We collected photo and feedback evidence to examine the ease of the new steps of learning how to harvest the flaps, the realism and whether it made the first steps of learning easier.

To a novel learner, we found that following the initial dissection of 3 limbs, the use of a bright green dye might be an important factor in making the first steps of learning easier and faster. This is perhaps due to the simplification of the most important step which is identifying and protecting the perforators. We found that it made understanding the concept of free flap raising much faster when clarified with color. To an experienced trainee/consultant: We found teaching the concept of perforators easier, the ease of finding the perforators would probably raise confidence of the novel trainees.

Using simple tricks such as colour changes can make initial learning more efficient, which translates into cheaper and safer process.



Medical Education Research-4 PP3F002

Imposter Phenomenon Among Undergraduate Physical Therapy Students

Sarah Ehsan, Irum Muhyyudin Riphah International University

Imposter phenomenon is the fear of exposing in front of others. Imposters credit their own achievements to luck and doubt their abilities to become good professionals. The objective of the study was to determine the level of imposter phenomenon among undergraduate physical therapy students of Lahore, Pakistan.

This cross-sectional survey was conducted in private and government Physical Therapy Institutes of Lahore, Pakistan from September to November 2019. Male and female final year physical therapy students were included in the study. Imposter Phenomenon was measured using Clance imposter phenomenon scale which is a 20-item questionnaire.

Out of 254 undergraduate physical therapy students, 57.5% showed frequent Imposter feelings. Only 2.4% of participants showed fewer Imposter characteristics. The association of gender and the Imposter phenomenon was non-significant (p-value>0.05). cGPA showed a statistically significant association with Imposter feelings (p-value<0.05).

Imposter feelings are frequent among undergraduate physical therapy students which can interfere with their learning prospects as well as their professional growth. An association of cGPA with imposter syndrome shows



Medical Education Research-4 PP3F003

Online Test Anxiety Level Among DPT Students During Covid-19

Ameera Aamar, Alieza Khalid, Wafa Ahmad, Ambreen Gul & Ayesha Afridi Riphah International University

COVID-19 crisis had a huge impact on education and academics. Besides, it might have generated public fear and worry. All these factors might affect students' performance and wellbeing and might increase stress levels especially during exams/tests

An online Test Anxiety questionnaire with 10 items and total score of 50 was used to gather data about the different levels of anxiety among Pakistani higher education students both gender from twin cities. Lower score indicates no anxiety and higher scores indicate unhealthy high level of anxiety. The data obtained through an online survey were analyzed by frequency of common students' responses and were stated in percentages. Demographic data is reported in percentage of students' responses. The participants not engaged in online teaching, not willing to participate or incomplete questionnaire responses are not included in the study

332 students responded with mean ± SD age 21.78±2.19, out of these 77.7% (n=258) were females and 22.3% (n=74) were males. Third year of education was 38% reported by responded students. 63.6% students reported scores between 20 –35 indicate that, although they exhibit some of the characteristics of test anxiety, the level of stress and tension is probably healthy while 34.3% students reported scores over 35 suggest that they are experiencing an unhealthy level of anxiety and only 2.1% students reported a low score (10-19) indicates that they do not suffer from test anxiety.

online test anxiety level is visible among students during the crisis of covid-19 while the majority of the students can take this anxiety level as healthy for their online education



Medical Education Research-4 PP3F004

Stress, Motivation and Academic Achievement in Undergraduate Medical and Nursing Students: A Longitudinal Cohort Study

Julie Chen, Weng-Yee Chin, Agnes Tiwari, Janet Wong, Joyce Tsang, Cs Lau Li Ka Shing Faculty of Medicine, the University of Hong Kong

Medical and nursing curricula are typically workload-heavy and clinically demanding which contribute to stress and have an impact on learning. This study aimed to investigate the association between stress, motivation to learn and academic achievement in medical and nursing students over the duration of their studies.

This was a longitudinal cohort study. Medical (MBBS) and nursing (BNurs) students admitted in the academic year of 2014-2015 were invited to complete a questionnaire annually until graduation. Questionnaires were administered during face-to-face mandatory teaching sessions and replaced with online surveys if necessary. They comprised the Perceived Stress Scale (PSS-10) and the Self-Efficacy and Intrinsic Value subscales from the Motivated Strategies for Learning Questionnaire (MSLQ). Information on students' perceived academic standing and their actual academic outcome were also collected. Data were analysed with descriptive statistics, linear mixed modelling, independent t-test, and Spearman's correlation.

Stress peaked in Year 2 for both MBBS and BNurs students. Over time, self-efficacy increased sharply for MBBS while intrinsic motivation declined. Both domains remained fairly constant for BNurs students. Self-efficacy was positively associated with actual academic outcomes for both MBBS (final grades) and BNurs (cumulative GPA). There was no statistically significant correlation between stress or motivation and academic outcome. MBBS and BNurs students who rated their academic standing as below average had higher perceived stress and lower self-efficacy than those rated themselves as above average.

The peak level of stress in Year 2 is a concern and worth deeper investigation. Enhancing student self-efficacy may help improve academic outcomes.



Medical Education Research-4 PP3F005

Impacts of Peer-Mentoring Program On Successful Computer-Based Competency Test at First Taker of the Student Doctor Profession

Shofiyah Latief Medical Faculty of Universitas Muslim Indonesia

The competency test for prospective GP, Doctor Profession Program (UKMPPD), is an obligatory for Indonesian Doctor. However, the low-graduating rate has been an issue for years. Kemdikbud suggests peer-mentoring. Therefore, researchers aim to examine peer-mentoring program significance towards the success rate of CBT first taker participants.

This research was conducted descriptively using a retrospective method in MPPD at Medical Faculty of Universitas Muslim Indonesia (UMI) who took the Computer-Based Test UKMPPD exam (First Taker). The samples were collected from November 2014 to November 2020 using total sampling, which involved 980 participants. This study used the Independence Test T Sample to determine if there are average discrepancy grades of UKMPPD Computer-Based Test. The research analysis was carried out using the Chi-Square Test to find out the relationship between the level peer mentor program and Computer-Based Test of Doctor Profession Program graduation rate.

The first taker participants of the Computer-Based Test of Doctor Profession Program (UKMPPD) at the Medicine Faculty of Universitas Muslim Indonesia who participated in the peer mentor program are 712 people in total. They consist of 593 passed, and 119 failed. Meanwhile, not-participating peer mentoring program is as many as 268 participants that 198 passed and 70 failed. The result of Independence Test Sample T-Test results from Sig value. (2 tails) of 0.000. Then the analysis using Chi-Square obtains Asymptotic Significance value (2-sided) of 0.001.

There is a significant difference in Doctor Profession Program (UKMPPD) Computer-Based Test value on first taker participants at the Medicine Faculty of Universitas Muslim Indonesia with peer mentoring or not.



Medical Education Research-4 PP3F006

Psychological Conditions of Undergraduate Students of Faculty of Medicine, University Islam Indonesia During Pandemic Covid-19

Rokhima Lusiantari, Miranti Dewi Pramaningtyas, Niken Widyaningsih, Umatul Khoiriyah Faculty of Medicine UII

The COVID-19 pandemic has brought changes in medical education. The physical restrictions lead to full online learning that is a new for students. Students' failure to adapt in this situation might cause psychological disorders. This study was aimed to see the psychological conditions of undergraduate students during pandemic Covid-19

This study was a cross sectional using a mixed methods design. The study population was all of undergraduate students (Year 1 till Year 4) of Faculty of Medicine UII in the academic year 2020/2021. Subjects were determined by consecutive sampling (n=299). Data collected through Self Reporting Questionnaire 29 Items (SRQ-29) and open question in terms of students feeling. Quantitative data was analyzed using Kruskal Wallis-Test by comparing students mental state in each year. Qualitative data were analyzed thematically

More than half of students had mental disorders (59 %). The percentage of mental disorders for Year 1 -Year 4 were 65, 59, 60, and 57 respectively. There was no significant difference of the number of students who had mental disorders in each year (p> 0.05). Most of students experienced that they felt stress and bored in this pandemic situation. Students in each year had different additional stressor. For instance, students' year 1 were struggle to adapt in higher education learning environment, while forth year students were facing a problem to finish their study on time.

Pandemic Covid-18 and the change of learning methods become essential stressor for students. Faculty need to monitor students' physical condition regularly and to design comfort learning methods for students.



Medical Education Research-4 PP3F007

Analysis of Differences in Achieving Cognitive Competency for Clerkship Students of Doctor Profession Study Program Faculty

Andi Tenri Sanna Universitas Muslim Indonesia

During pandemic Covid-19 period, learning activities for clerkship medical students were carried out using the online method. This study analyzed the differences in learning online methods during the pandemic and offline methods before the pandemic in achieving cognitive competency in the doctor profession program students of faculty of medicine UMI The data compared and analyzed the pretest average scores which were carried out before clinical rotation and posttest average score which were carried out after completing the clinical rotation in each department. Data were analyzed using the Wilcoxon Test

The average pretest value is 37,39% and 38,28? fore and during pandemic Covid-19 using online method, respectively while posttest average value is 79,28% and 79,17? fore and during pandemic Covid-19 using online method, respectively. The difference is not statistically signifficant

Achievement of doctor profession program student's cognitive competence by learning online methods during the Covid-19 pandemic are a good solution in achieving student cognitive competence during the Covid 19 pandemic



Medical Education Research-4 PP3F008

Does Online Learning Method Implicate to Student Objective Oral Case Analysis (Sooca) Performance of First-Year Students?

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Online education faces its own challenges, such as technical issues, limitations in teacher-student interaction, and difficulty in performing self-directed learning, especially in first-year students. The aim of this study is to analyze the SOOCA performance of first-year students that undergo online and offline learning in the Faculty of Medicine, Universitas Islam Bandung

The data used in this study was the SOOCA Performance of Biomedic 1 course collected from the Assessment Division of MEU. SOOCA performance of 402 students was divided into two groups, group 1 consisting of 192 students of class 2020/2021 and group 2 consisting of 210 students of class 2019/2020. The number of SOOCA passes was analyzed by Chi-square and the mean SOOCA score was analyzed using the Mann-Whitney Test.

The results showed that the number of passes and the mean SOOCA score of group 1 was significantly lower than that of group 2 (p <0.05). However, it can be said that there is no correlation or very weak correlation between the number of SOOCA graduations and the learning methods (r = -0.133). These results imply that there are a lower number of passes and the mean SOOCA score of students who received online learning compared to the group of students who took the offline method even though the correlation was weak.

The lack of optimal interaction and student awareness in performing self-directed learning is thought to be the factors involved in causing SOOCA performance decline.



Medical Education Research-4 PP3F009

Exploring The Perceptions of Faculty and Students About Online Open Book Exams in Undergraduate Medical Education

Khaulah Jawed, Tahira Sadiq Riphah International University Islamabad

Unfortunately, the Year 2020 took a start with a pandemic of COVID -19, which lead to a lockdown to contain the infection. Lockdown hindered many activities of life like business, transport, treatment, and education overall the world. In medical education, institutes were closed and faculty started teaching from home, clinical teaching

This is a qualitative exploratory study, with narrative design. At Islamic International Medical College, Islamabad. The study will be from Jan 2020- June 2021. Purposive sampling will be done for the focus groups and interviews. Students from two classes will be selected to explore the experience of basic and clinical sciences. 12 students will be selected for focus group discussion and 8 faculty members will be selected one from each subject. After transcription, triangulation will be carried out data will be analyzed with Nvivo and coding will be done.

Results N/A. As the study is to be done now.

The faculty will be facilitated for the development of online open-book exams using LMS in their undergraduate medical colleges.



Poster Presentation 6: Medical Education Research-5 PP3G001

Are We Neglecting Nutrition in UK Medical Training? A Quantitative Analysis of Nutrition-Related Education in Postgraduate Medical Curriculums

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Suboptimal nutrition is a major cause of morbidity and mortality in the UK. Although patients cite physicians as trusted information sources on diet and weight loss, studies suggest that the management of nutrition-related disorders is hindered by insufficient medical education and training.

Objectives:(1)Quantify nutrition-related learning objectives (NLOs) in UK postgraduate medical training curriculums and assess variation across specialties;(2)assess inclusion of nutrition-related modules;(3)assess the extent to which NLOs are knowledge-, skill-, or behaviour-based, and in which Good Medical Practice (GMP) Domain(s) they fall. 43 current, GMC-approved postgraduate curriculums, representing a spectrum of patient-facing training pathways in the UK, were included. NLOs were identified using four keywords: 'nutrition', 'diet', 'obesity', and 'lifestyle'. Where a keyword was used in a titled section followed by a number of objectives, this was designated as a 'module'.

A median of 15 NLOs (mean 24) were identified per curriculum.(i) Ten specialties(23%) had fewer than five NLOs identified, including General Practice. Surgical curriculums had a higher number of NLOs compared with medical(median 30 and 8.5, respectively), as well as a higher inclusion rate of nutrition-related modules(100% of curriculums versus 34.4%, respectively). (ii)52.9% of NLOs were knowledge-based, 34.9% skill-based and 12.2?haviour-based. The most common GMP Domain assigned to NLOs was Domain 1(53.0%), followed by Domains 2(20.6%), 3(18.7%), and 4(7.7%). This study demonstrates considerable variability in the number of nutrition-related learning objectives in UK postgraduate medical training.

As insufficient training may underlie inadequate doctor-patient discussions regarding nutrition-related health conditions, the results of this analysis suggest a need for further evaluation of nutrition education in postgraduate training.



Medical Education Research-5 PP3G002

The Impact of The Online Exam Module On Student Anxiety During The Covid-19 Pandemic

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The Covid-19 pandemic has an impact in all sectors of life. Faculty of medicine issued a regulation on the implementation of online education to break the chain of spreading Covid-19. This research aimed to assess the impact of the online exam module on student anxiety during the Covid-19 pandemic.

The method used in this present study was a descriptive analytical method. The research was conducted at the Faculty of Medicine, Universitas Mulawarman, Indonesia. All students of this faculty who took the exam using the online exam module became research respondents. The research was carried from three stages including preparation, the implementation and the evaluation of the online exam module. The anxiety of students during this online examination was evaluated to determine the effect of this kind of examination on the anxiety of students. The anxiety of students was measured using questionnaire prepared based on Hamilton Rating Scale.

A total of 504 respondents (141 male students (28 % of total respondents); 363 female students (72 % of total respondents)) who had undergone online examinations were involved in this present study. The result was 62% experienced mild anxiety, 19% experienced mild-moderate anxiety, and 19% experienced moderate-severe anxiety. For the level of anxiety based on gender, 69.6 male and 30.4% male students experienced mild anxiety, 70,8 male and 29.2% male students experienced mild-moderate anxiety, and 81,1 male and 18.9% male students experienced moderate-severe anxiety.

It can be concluded that students who take the online exam module majorly tend to experience mild anxiety. The level of anxiety of female students is higher than male students.



Medical Education Research-5 PP3G003

Development of Islamic Work Ethics Measurement Tool at Pakistan's Healthcare Industry?? (Medical & Dental Colleges)

Faizan Munir Khan Riphah International University

The field of measuring Islamic work ethics is a nascent one and little work has been done on it. Most cited work is of Mr. Ali but that is heavily influenced by protestant work ethics and Arabic culture.

A new data collection tool will be constructed that is supported by literature. For qualitative part of research, focus groups discussions will be performed. The 5-point Likert scale questionnaire will be used to obtain quantitative data. The quantitative data will be analysed through statistical tests through SPSS software. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) will be performed.

Results N/A

After measuring observance of Islamic work ethics by newly designed questionnaire, strengths and weakness among various attributes of Islamic work ethics will be identified and can be addressed.



Medical Education Research-5 PP3G004

Quizzes' Implementation in Small Group Learning Activity In Medical Professional Program Of Indonesian Moslem University

Prema Hapsari Hidayati Indonesian Moslem University, Indonesia

As Covid 19 pandemic start, we have been using online methods in Small Group Learning (SGL) activity for medical professional program's atudents and start using Quizziz, an educational game online to get better understanding. The aim was to determined the effect of Quizziz's implementation in SGL activity

this study was quasi experimental one group pre-posttest design, involving 107 medical professional students of Indonesia moslem university who were enrolled in SGL activity in november 2020. Quizziz was done before and after SGL activity, and the results were statistically analized. The student also asked to answer some survey question about quizziz performance

In this study we found the mean of quizziz pre SGL's score was 54,93 (SE+-1,448) and mean of quizziz post sgl's score was 88,64 (SE+-1,141). Because of both data were normal distribution, so we compared both of them statistically using t-paired student test, and we found significantly different with p value <0,001. From the survey's result we found 88,3% student said that quizziz's question were consistented with SGL content, 87,9% student felt that quizziz imperoved their focus, and 85% said that quizziz helped them to understand the SGL's subject

Quizziz's implementation has helped medical professional students to get better knowledge in Small Group Learning activity



Medical Education Research-5 PP3G005

Digital Professionalism: Perceptions of Students In Wah Medical College

Abdullah Shahid, Muhammad Usman, Ayesha Younas Wah Medical college

The term digital professionalism refers to appropriate professional behaviors during the use of digital media. The covid-19 pandemic has caused teaching and learning in undergraduate medicine to be shifted online. This study aims to find out students perceptions regarding digital professionalism during their online learning activities.

This was a descriptive cross-sectional study started in Wah Medical College from November 2020 to January 2021. Likert scale Questionnaire was developed after consulting relevant literature. Ethical approval was obtained from IRB committee of the college. Wah Medical college has a total of 515 students across five years of the MBBS programm, all of whom are involved in online learning. Universal sampling was done and all students who consented to participate were included in the study. Data collection was done by Google forms sent to students through email and whatsapp. Data analysis was done on spss version 21.

Response rate was 81.55% (n=420). 41.9%(n=176) students were male and 58.1%(n=244) were female. Among the respondents, 20.7% were from first year, 15.7% from 2nd year, 16% from 3rd year, 23.8% from 4th year and 23.8% were from final year. Mean scores for all domains were calculated on a likert scale of 1 to 5. They were: proficiency in digital learning: 3.73, for responsibility in online learning: 3.13, online communication skills: 3.10 and etiquettes in online learning: 3.84

Students demonstrated positive behaviors with respect to digital professionalism. There is a need for proper training of students so that they are able to become more competent digital professionals.



Medical Education Research-5 PP3G006

Development and Validation of Multidimensional Questionnaires To Measure Quality Of Virtual-Learning Courses

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Tehran University of Medical Sciences

A critical multidimensional questionnaire evaluating both asynchronous and synchronous methods of e-learning was required. This evaluation must reflect both students' and faculty members' perspectives in order to be applied to the improvement of e-learning quality. This study aimed to develop and validate questionnaires to evaluate the quality of virtual-learning courses.

First, a thorough literature review was conducted to determine contributing factors in the quality of e-learning. Included Databases were Scopus, WOS, PubMed, Eric, MagIran, and SID. After excluding duplications and irrelevant articles based on their title and abstract, 2077 entries were narrowed down to 96. All factors extracted from the aforementioned articles were classified into three categories: "The quality of e-learning courses", "The quality of teachers' performance", and "The teachers' attitude". Content validity was evaluated by ten faculty members using content validity ratio and content validity index. Face validity was assessed by cognitive interviews with target groups of the questionnaires.

Based on the content and face validity process, the researcher-made questionnaires were validated in three dimensions including "Students' perspectives on the quality of e-learning courses" (13 items, Cronbach's alpha = 0.946), "Students' perspectives on the quality of teachers' performance in e-learning" (12 items, Cronbach's alpha = 0.89), and "Teachers' perspectives on e-learning" (20 items, Cronbach's alpha = 0.95). Responses are quantified on a 5-point agree/disagree Likert scale. Cronbach's alpha of questionnaires was calculated to assess the internal consistency of items.

Three valid and reliable questionnaires were developed to evaluate quality of e-learning experiences. They could be used for any online course evaluation even after the resolution of the Covid-19 pandemic.



Medical Education Research-5 PP3G007

Assessment of Improvement in Knowledge and Skills Following Workshops On Effective Application of Cricoid Pressure

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Cricoid pressure is applied to occlude the esophagus and reduce the risk of acid aspiration during endotracheal intubation. Aspiration of gastric contents can lead to major morbidity and mortality. We conducted workshops for anaesthesia technicians and nursing staff responsible for assisting endotracheal intubation in operating rooms and critical care areas. Approval was granted by the Ethics Review Committee and Informed consent was obtained from all participants. The workshops were funded by a grant from the University Research Council.

Five workshops were conducted with 20-22 participants each. A written and hands-on preworkshop test was conducted to assess baseline knowledge and skills. The workshop program consisted of didactic teaching, interactive sessions, videos and hands-on practice on specially designed manikin. A post-workshop test was conducted at the end of the workshop and feedback was provided to the participants. Participants were called back three months later for assessment of retention of skills.

A total of 102 participants attended the workshops. The mean scores for post-workshop written test were significantly higher than scores for pre-workshop test (7.12±2.32 vs. 12.32±2.12; p<0.01), indicating 73% increase in knowledge after the workshop. Improved scores were seen for each question of the test. Similarly, post-training mean hands-on scores were significantly higher than pre-training scores (6.31±0.96 vs. 2.72±2.00; p<0.0005), indicating a 131% improvement. Only 74 participants (73.5%) appeared three months after the workshop for assessment of retention of skills (hands-on). A 20 crement was observed compared to the post-training hands-on assessment (5.15±1.71 vs 6.45±0.86; p<0.0005), which was statistically significant.

Significant improvement was seen in knowledge and skills of anaesthesiology technicians and critical care nurses following training in cricoid pressure. However, a 20% reduction was seen in retention of skills.



Medical Education Research-5 PP3G008

Correlation Study of Medical Parasitology Practical Work and The Achievement of Parasitology Content On Final Exam

Fitria Siwi Nur Rochmah, Novyan Lusiyana Universitas Islam Indonesia

Parasitology practical work was expected to strengthen the retention of parasitology content of medical student in elderly's final block exam. The aim of this study was to determine the correlation between the practical work score and the achievement of parasitology content on final exam in Elderly's block

This is a cross sectional study using secondary data of medical students class in elderly's block which complying the inclusion criteria. The data were divided into practical work and achievement of parasitology content on elderly's final exam. The achievement of parasitology content on final exam was counted from the average of true answer question, divided by all parasitology questions. The data were analyzed for the normality and median value. A descriptive analysis, Spearman correlations test, was performed to find out the correlation between parasitology practical work and parasitology content on elderly's final block exam

The data of practical work and achievement of parasitology content which fulfill the criteria were on 2015's and 2017's class. The median score of both data on each class were (75.75; 71.43) and (61.75; 50) with normality test score p > 0.05. The median score of practical work on 2015's was higher than 2017's class. The Spearman rank test between the 2 parameter on 2017's class was showed that the practical work and achievement of parasitology content in final exam wasn't related (p=0.000), but the 2015's class was related (p<0.05; r=0.213)

The achievement of parasitology content was still required to improve. The factors which are influence the retention of student parasitology knowledge should be evaluated as a basis to improve methods



Medical Education Research-5 PP3G009

Interplay of Cognitive Strategies Used by Teachers and Extraneous Load Of Medical Students

Shabana Ali, Raheela Yasmeen Islamic International Medical College

While preparing a teaching session, medical teachers need to employ appropriate cognitive strategies to decrease extraneous load of students as it makes space for processing complex information. The objective of study was to explore the use of cognitive strategies in medical teachers with reference to their teaching sessions

A phenomenological study was conducted after approval from ethical review board of the Islamic international medical college. Pre-clinical and clinical medical teachers were selected through purposeful sampling without gender discrimination. Data was collected through semi structured interviews and transcribed for "Textural and structural analysis" by observing "What" was said by the respondent and "how" it can be explained. Each statement was given equal value. Coding was done in two cycles. A constant comparison among the respondent's responses was done to form categories and themes during second cycle of coding. Inductive thematic analysis was done.

Total seven themes were identified. All teachers preferred to know the "learning objectives" of teaching session. Medical teachers preferred to "rehearse by repeating their topic for better communication" and believed in "making summaries" to clear their concepts and thinking of "metaphors". An attempt to find the answers of possible "questions by students during teaching sessions" was found another footstep of their learning. For their deep learning, medical teachers preferred to organize their content and use "flow charts to split the main concept along with pictures" in their presentation. "Video and pictures" were preferred as tools for better understanding of learners.

Medical teachers apply cognitive strategies to reduce extraneous load of learners. They repeat their concept for better expression and communication during teaching. Making summaries and analogies facilitates their teaching while



Medical Education Research-5 PP3G010

The Effectiveness of Using Substitution Mannequin in The Implementation of Medical Skills of The Samara Family Block

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The Covid-19 pandemic has caused students being unable to learn medical skills directly using standard mannequins. This study intends to determine the effectiveness of using a substituted mannequin in implementing elective block medical skills of the Samara Family and other things that need to improve in the future.

The study has received approval from the ethics commission. The subjects were 40 out of 59 students who took in the Samara Family block at the Faculty of Medicine at the Islamic University of Indonesia in 2020. The inclusion criteria are students were willing to take part in the research by signing informed consent. This research was conducted by filling out questionnaires and in-depth interviews for selected students. The analysis is using the Spearman SPSS correlation test.

In-depth interviews showed that students could carry out the learning of the Samara Family medical skills well and the medical activities don't need to be postponed because of the uncertainty of the pandemic end. Respondents stated that instructors were very helpful in the process of implementing medical skills. Although some respondents have to pay more than usual. Respondents said that they were satisfied with the results of the Samara Family medical skills test they obtained. However, the results of the analysis were not statistically significant (p> 0.05).

The use of substitute mannequins is quite effective. The examination can be held in shift so that students don't wait too long.



Poster Presentation 7: Medical Education Research-6 PP6F001

I-Evening: Design, Implementation and Evaluation of Virtual Interactive Case Based Learning Course for Preclinical Medical Students

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Case-based learning is a well-established, student-centered learning method which facilitates theory to practice linkage. Case-based learning could be efficient in improving the critical thinking skills and enhancing deeper learning. The study aimed to assess the effects of virtual interactive case based learning course on satisfaction and attitude of medical students.

The virtual case based learning course was held over a seven months' period in 2020. Forty four third-year medical students divided randomly into six small groups participated in 10 sessions. Each session was conducted small group discussions with presence of a facilitator helping students take the presented case forward to get appropriate information toward differential diagnosis and proper treatment plan followed by the interactive class with experts to get familiar with the proper clinical reasoning pattern of facing the case.. Program evaluation was based on the Kirkpatrick model using survey forms and a focus group for learners and facilitators.

Total score of the learners was 3.83 out of 5 points. 93.30% of learners wanted the course to be continued and 88.70 percent would like to recommend it to their friends. 90% of learners stated that this course was successful in strengthening their clinical reasoning skills and 96.60% of learners and 100% of facilitators acknowledged the effectiveness of this course in reviewing and consolidating their previously learned material. 88.9% of facilitators considered it effective in increasing their motivation, especially during the Covid-19 pandemic. Also learner's involvement in teamwork and interaction between teammates shows a positive trend.

Overwhelmingly learners were satisfied with this course and the interactive environment. The data suggest the virtual cased-based course success in improving critical thinking skills, clinical reasoning, deeper learning and self-confidence.



Medical Education Research-6 PP6F002

Perception of The Medical Students On "Structured In-Class Group Activity" In Large Group Tutorials (LGT)'

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In our medical school, LGT is held as optional at the end of every 5–6 lectures to facilitate revision. Poor utilisation of these sessions made us seek an alternative and acceptable approach. So, we used a 'student-centred structured-in-class group activity' (SGA) and studied the students' perception of SGA-based revision.

This study was conducted in PURCSI school of medicine on two cohorts, each consisting of 46 students. These students underwent four SGA sessions in one of the second year modules, and eligible students were administered with the 26-items online survey questionnaire. The survey questions were mainly focused on exploring the impact of SGA on student-learning, teamwork, communication skills, motivation, and confidence. Ethical clearance was obtained from the institutional ethics committee. The participants were made aware of the voluntary nature of the study, and written consent was obtained.

There was a total of 70 responses from the two cohorts. The majority of the students opined the SGA helped them to understand the module content and felicitated the problem-solving abilities and promoted deep learning. Besides, SGA enabled them to work in a team, express their ideas and learn together. A majority felt that SGA helped engage with their peers which motivated them to know better by clarifying their doubts. Overall, the students had a positive SGA experience and want more SGA activities for revision in other modules and subsequent semesters.

SGA-based revision sessions were more effective and meaningful to students, so, it can be used for revision in all modules in the early years of medicine.



Medical Education Research-6 PP6F003

Differences in Learning Outcomes Using the Cornell Method and The Non-Cornell Method for Students

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Taking notes is one of the learning strategies that can be used for effective learning. Taking notes function is to organize, to explain, to understand the important information during the study. The aim of different study outcomes use the Cornell method and non-cornell method This research was a quasi-experimental research method with a non-equivalent control group design. This research was conducted from September until October 2019 at the Faculty of Medicine, Baiturrahmah University. The population in this study were students of the first year consists of the experimental group using the Cornell method and the control group using a non-cornell method with 15 samples in each group. Analytic was used SPSS version 19.0. Univariate data analysis was presented in the form of a frequency distribution table for respondents' characteristics and differences in study outcomes using the Mann Whitney test. There were different study outcomes between the experimental group with a control group with a Mann Whitney value of p=0.025. The participant of the experimental group was female 9 respondents (53.3%) and the control group was male 8 respondents (53,3%). Most of the students were from outside Padang which are 10 respondents (66.7%) of the experimental group and 13 respondents (86,7%) of the control group. Most of them staying in the dormitory were 10 respondents (66,7%) of the experimental group and 13 respondents (86,7%) of the control group.

There were different study outcomes use the Cornell method and the non-Cornell method in Medical Student Baiturrahmah University.



Medical Education Research-6 PP6F004

Flipped Classroom Implementation During Covid 19 Pandemic in Elective Block the First Thousand Days of Life

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FM UII in adapting to learning in covid-19 pandemic era develops the flipped-classroom method. There are several lecture sessions in the First Thousand Day Elective Block which held in the form of this method. This study is to evaluate the implementation of the flipped-classroom in this elective block.

This study was an observational study with a mixed-methods design. Evaluation of the implementation of flipped classroom learning is carried out by analyzing student behavior in flipped classroom learning and also student perceptions of the implementation of flipped classroom courses in the Elective Block First Thousand Days of Life. Behavioral analysis is carried out through analysis of student activity recaps in accessing learning material in the form of quantity in accessing learning material, complete percentage of accessing learning material, and quiz work. Perceptions about flipped classroom learning are obtained through a learning evaluation questionnaire contains student perceptions.

There are 6 topics of flipped classrooms being analyzed. The number of students' access to course material ranges from 1 to 10 times of access. The percentage of completeness observing course material is 1 to 100%. The correct number of quizzes taken ranges from 1 to 10. Positive responses to learning with the flipped classroom method are the material can be studied repeatedly and there are opportunities for more discussion during face-to-face sessions.

Students give positive response to flipped-classroom as learning methods during covid-19 pandemic. Behaviors in learning that seem to still vary need further exploration to improve of better learning.



Medical Education Research-6 PP6F005

Bringing The Clinician to The Practical Class: Exploring Online Supervision of Physiotherapy Skills

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The COVID-19 pandemic presented challenges for teaching practical skills, requiring innovations using online technologies. In Singapore, clinicians were restricted to their clinical site and only allowed to mix with staff from the same clinical team. With students return to campus, there was an opportunity to explore videoconferencing (ZOOM) for supervision. This cross-sectional study captured evaluations by a clinical-based physiotherapist (tutor) and 15 student triads, participating in online supervision during a physiotherapy skills class. The class was a scheduled review session and the online tutor was in addition to normal staffing. Ethics approval was provided by the Singapore Institute of Technology, Institutional Review Board (No. 2020160). Participant information was posted on the learning management system and consent was implied by return of surveys. Data was collected from students and one online tutor, using a two-part question to rate satisfaction and quality, and four open-ended questions eliciting perceived benefit, challenges and recommendations. Descriptive statistics were used to analyse the ratings, and open question responses were collated and summarized. The tutor rating for both satisfaction with online supervision and quality was 7/10. Students' mean rating for satisfaction was 4.6/10 (SD 2.2) and quality 5.6/10 (SD 1.9). Both students and tutor found the sessions convenient, especially the tutor who felt they could be involved without negotiating clinical time or travel. Common challenges included background noise, internet connectivity issues and restrictions in facilitating and correcting manual therapy techniques. Most students recommended their online timeslots be pre-scheduled, with a dedicated plinth setup for the online interaction. This study provides modest support for online supervision in physiotherapy training, especially when clinicians' movement is restricted. A dedicated quiet space with good internet connectivity will enhance these learning experiences.



Medical Education Research-6 PP6F006

The Correlation Between Physical Activity and Academic Motivation of Undergraduate Medical Students Of The Universitas Islam Indonesia

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The Covid-19 pandemic has caused changes in activity. Changing physical activity can cause various psychological changes in humans. In medical students, psychological changes due to physical activity are an important factor in supporting learning motivation to learn. This study aims to examine the correlation between physical activity and academic motivation

This study used a cross-sectional method with a sample of undergraduate students of Medicine at the Islamic University of Indonesia and given an e-questionnaire. Physical activity is measured by the International Physical Activity Questionnaire (IPAQ) and Academic Motivation is measured by the Intrinsic Motivation to Know (IMTK) which is part of Academic Motivation Scale (AMS). Subjects were selected through consecutive sampling method, and followed the inclusion and exclusion criteria After the main test was carried out, statistical analysis was carried out on the collected data using SPSS 23.

The analysis data using the Kolmogorov-Smirnov normality test with two variables (period of e-cigarettes consumption and anxiety level) is p<0>0.05

This study shows that there is no relationship between physical activity and academic motivation of undergraduate Medical Students in Universitas Islam Indonesia during the Pandemic



Medical Education Research-6 PP6F007

Correlation Between Regional Exam and The Progress Test of The Undergraduate Medical Student Towards The Student Grade-Point

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UTB and PT are a formative assessment of cognitive. UTB is intended for 4th year students to determine the ability of pathomechanism to therapy. PT has been conducted since 2012 to see the progress of student knowledge. This study aims to determine the correlation between UTB and PT to IPK

This research is a observational study with a cross sectional approach. Total 324 students who were analyzed. Linear regression measurements were carried out for UTB II scores (7th semester/4th year) and 4th PT scores (7th semester/4th year) with a student achievement index for batch 2015 (176 students) and 2016 (159 students). The exclusion criteria for the subjects of this study were students who did not follow one or both of these formative assessments. A total of 11 students were excluded from the analysis because they did not participate in either of these assessments

The data normality test showed a P value of 0.494. UTB regression data on the student achievement index (IPK) obtained a significance value of p 0.000 and PT on the IPK obtained a significance value of p 0.000. R value of 0.681. From these results indicate that the value of UTB II and 4th PT each correlated with IPK with moderate correlation strength

UTB II and 4th PT correlate with cognitive competence. UTB I, II and III correlation testing is needed. Annual progressive correlation test of PT results is required



Medical Education Research-6 PP6F008

To Evaluate the Use of SBAR Protocol in Undergraduate Medical Student Clinical Training to Improve Situational Awareness

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Medical students and fresh graduates develop cognitive overload while dealing with patient information and are unable to prioritize information and identify essential data. SBAR helps students to think ahead and analyze the patient data and promote situational awareness. This study evaluates the effect of using SBAR on student situational awareness.

Using the WHO sample size calculator with a Confidence level set at 95% and a confidence interval as 5. The sample size calculated was 148. This was rounded off to 150. After consent 150 students will be enrolled and randomized into 75 students in the intervention (Group A) and 75 students in the control group (Group B). STUDY DESIGN: Experimental SAMPLING: Convenience INCLUSION Fourth and final year undergraduate medical students in gynecology clerkship. EXCLUSION 1. Students having had electives in other institutions where SBAR was used 2. A student having done electives in gynecology before this rotation. ANALYSIS: t-test Students will be taught the assessment and management of obstetrical emergencies for 2 hours daily for 2 weeks. A pretest will be taken with SA from the 150 students in four groups. Ten subject experts of obstetrics and gynecology and 5 medical educationists will be involved in creating scenarios, queries, and scoring for situational awareness (SAGAT) for 4 stations of gynecological and obstetrical emergencies. Group A will be given 1-hour training on SBAR communication. They will be allowed to practice this format for 2 weeks. Group B will continue the format currently used. Post-test OSCE with SA will be conducted.

Training undergraduate students in SBAR format will help students to prioritize the patient information develop patient schemas to organize information decreasing cognitive load. Assessments and scoring can focus on metacognition



Medical Education Research-6 PP6F009

The Fate of Health Professions Education as a Profession: The Road Less Traveled

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To explore the experiences and views of all types faculty of health profession education(HPE) associated with this department, committees, institution Heads, MHPE alumni, students about HPE as a full time profession, its identity as a discipline, importance as an institute, organization & empowerment, functions, faculty fate & future with recommendations. The Questionnaires with semi structured open ended questions will be used for collecting views and experiences of the participants of the study.

METHODOLOGY This will be a Qualitative exploratory study design. Riphah international University Al Mizan campus and other institutes where experienced or novice Medical Educationists are working, online medium (Zoom) for semi structured interviews will be used. Purposeful sampling with maximal variation sampling technique will be used for selecting 18 to 20 participants. Exclusion criteria include medical and dental faculty who has not done the MHPE/MME.

This study will act as a guide for students to pursue it as a full time career which is required for the improvement of Medical education



Medical Education Research-6 PP6F010

Establishing a National Mentorship Scheme in Wales, UKe

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Context and aims: Mentorship is recognised to be a powerful tool in career development for the mentee. Currently there are no mentoring schemes available in Wales, UK. Our aim was to establish and run a National Foundation Surgical Mentorship Scheme: matching foundation doctors interested in surgery to core surgical trainees.

Methods: A survey was advertised through Facebook groups and by email to engage with foundation doctors interested in being mentored. The surveys explored the participants' perceptions of mentoring and the tools they need to achieve their personal goals and aspirations. These delegates were matched with core surgical trainees in Wales recruited through a 'Wales core surgical trainees' Whatsapp group. A live virtual mentoring workshop 'how to get the most out of mentoring' was held to introduce mentoring to all delegates. All delegates have been provided with summary sheets of the workshop and a mentoring contract to use. Results: 52 delegates signed up to the mentorship scheme. 29 foundation doctors applied to mentored. 23 core surgical trainees applied to be mentors. The survey of the foundation doctors found 97% (28) stated that being part of a mentorship scheme would help them in their career. 83% (24) felt that they have not been exposed to enough potential mentors at work or medical school. 79% (23) stated that they did not already have a mentor like figure. 100% stated that the scheme would be beneficial to their career and progression and help them feel better prepared for surgical training applications.

Conclusion: There is demand for a surgical mentorship scheme. A National Wales Foundation Surgical Mentorship Scheme was launched in August 2020. Clinicians worldwide could start up similar schemes.



Medical Education Research-6 PP6F011

The Clinical Academic Training Crisis: Inspiring The Next Generation of Clinician Scientists

Krishma Adatia , George Hourston, Roshni Bhudia Addenbrooke's Hospital

Failure to recruit junior doctors into clinical academia is an international concern. Only 6% of the UK medical workforce are clinical academics, and few younger doctors perceive this as an attractive career pathway. We evaluated whether a focused teaching session could enhance knowledge, confidence, and interest in academic medicine.

We created and implemented a half day regional teaching session for Foundation Trainees within the East of England that comprised talks outlining the UK integrated clinical academic pathway, and interactive workshops on abstract writing, poster design and presentation. An online questionnaire-based cross-sectional study was conducted with participants rating measures including interest, knowledge, and confidence in pursuing an academic career and related skills. Outcomes were measured using Likert scales (1= 'Not likely', 5= 'Very likely'). 40 of 60 attendees responded to the pre-event questionnaire (67%), and 41 responded to the post-event questionnaire (68%). Paired data (33% of attendees) showed an increase in attendees' knowledge and understanding of academic career pathways (median 3 vs 4, p<0.001). Attendees were significantly more likely to consider an academic career having attended the course (median score 3 vs 4, p=0.02), and were more confident that their achievements were competitive enough to obtain a post on a formal academic training programme (median 2 vs 4, p=0.001). An improvement in self-reported confidence in abstract writing and presenting at conferences was also seen(p=0.01).

Early support and mentorship may help promote academic careers, however this would require a co-ordinated effort between medical schools, postgraduate deaneries, and existing clinical academics.



Poster Presentation 8: Medical Education Research-7 PP6G001

Technology-Enhanced Learning in Anatomy: A Literature Review

Vijayalakshmi Sitanadhi Bhojaraja PU-RCSI School of Medicine - Perdana University

Anatomy is taught using cadaveric-based dissections; however, due to advent in technology and limitations in obtaining the cadavers, the medical schools have to replace the dissection with other modalities. In this context, a systemic-review was done to explore the technology-based approaches to replace cadaveric dissection to teach anatomy.

A systemic search of peer-reviewed journals using search engines such as PubMed, Google Scholar, EBSCO, EMBASE, MEDLINE, and Scopus was carried out to answer the research question, "What technology-based approaches can be helpful to replace cadaveric dissection? We used the keywords like 'technology-enhanced anatomy learning', 'digital technology AND anatomy', 'computer-assisted learning AND anatomy', '3D anatomy models', '3D virtual reality anatomy', '2D anatomy images', 'medical imaging AND anatomy', 'virtual medical museum', 'anatomical AND surgical simulation', 'online interactive anatomy', 'digital anatomical library', 'anatomy AND 3D visualisation', and 'digital cadavers. The relevant articles matching the search criteria were included in the study.

Research states that technologies such as virtual medical museums, interactive online mediums, computer-assisted learning, two-dimensional (2D) images, M-learning mobile-based software application and three-dimensional (3D) model visualisation systems can create an interactive virtual reality environment that can provide self-directed and student-centred learning. These technology-based approaches found to enhance the knowledge and understanding of anatomical concepts. The clinical students preferred software and computer-assisted learning to study anatomy, compared to pre-clinical students. Some studies have indicated the students' preference for multimodal-approach involving both traditional and technology-based teaching-learning approaches to learn anatomy.

Anatomy is best learnt using both blended approaches, however, technology-based approaches can effectively replace cadaveric dissection if medical school has limited cadavers due to local regulations.



Medical Education Research-7 PP6G002

Designing Entrust Able Professional Activities (Epas) For Clinical Skills Acquisition in Undergraduate Physiology Laboratory: A Modified Delphi Study

Waqas Hameed Riphah International University

A standardized undergraduate training in clinical Physiology laboratory is essential to prepare graduates for multidisciplinary clinical practice yet the literature lacks clear guidelines or consensus of an optimal clinical Physiology learning. Keeping this in view EPAs for clinical skills acquisition in undergraduate physiology laboratory are being designed.

A Delphi study shall be conducted. Competencies for skills in clinical Physiology will be identified and grouped under EPAs. An online questionnaire with 5 point Likert scale shall be formulated. Questionnaire will be distributed for expert consensus on identifying EPAs, their competencies, assessment strategies and supervision level. Formulation of second questionnaire following data analysis of first round. Items with 80% or more response on 4,5 rating scale (top 2 measures) shall be excluded, rest resent in round 2 with individual and anonymized group response from round 1. Final set of EPAs shall be identified after consensus in third round

Results N/A

By designing EPAs for clinical skills acquisition for Physiology practical, a step is moved towards competency based approach to undergraduate clinical Physiology training and assessment.



Medical Education Research-7 PP6G003

To Assess the Impact of Faculty Development Workshop On Prescribing Safety Assessment Using Kirkpatrick Model

Adnan Jehangir Malik IIMC, RIU

Prescribing is one of residents' commonest tasks. Mistakes, which compromise patient safety. There is no evidence that competence-based education is preventing harm. Despite changes to undergraduate curricula, students still perceive issues in acquiring practical prescribing skills. Objective: To compare the pre & post faculty performance on PSA using Kirkpatrick Model.

The theoratical frameworks used are 1. The Kirkpatrick model for evaluation 2. Adult learning principles. Study Design Descriptive, quantitative interventional Study Setting & Duration Participants will be 75 faculty members from Medical, Dental & Pharmacy. The study will be completed in six months from January 2021 to June 2021 Sampling Purposive sampling, participants with base line knowledge of attempting PSA Workshop To access the impact of faculty development, 4 hours workshop will be conducted on 'Prescribing Safety Assessment' with 75 faculty members. It will be conducted for consecutive three days, 25 participants each day.

Data Collection Tool • Questionnaires (5-point Likert scale) • PSA (Pre & post) test questions score (items will be mapped to PSA structure) • Data will be analyzed quantitatively at different stages using Kirkpatrick Model in each step to measure reaction, learning, and change in behaviour and results in the form of change in bottom line. Data Analysis • Wilcoxon signed rank test will be used to analyze paired data (pre &posttest) using PRISM Version 7.04 (GraphPad Software).

The experience of preparing with (PSA) and participation in the assessment will engender confidence about their future prescribing. Final year medical students must pass PSA prior to their licensing.



Medical Education Research-7 PP6G004

Virtual vs. Conventional Practicum in Pharmacology: Student's Perspectives

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The pandemic of coronavirus disease (COVID-19) has significantly affected the medical education process, both in clinical and preclinical years. This study aimed to compare students' perspectives regarding the pharmacology practicum conducted in 2019 (prepandemic, conventional) and 2020 (virtual, via zoom platform).

The secondary data used in this study were derived from the questionnaires gathered from all students enrolled in two courses: a) Infection and b) Health Problems in Pediatrics. A questionnaire (comprises 14 Likert-scale questions and two open-ended questions) was used to assess co-teachers' performances (students - handled small group discussion in the practicum) and students' perspectives on the quality of practicum learning. An independent t-test was applied to compare each item of responses. The responses to open-ended questions in the questionnaire were descriptively analyzed.

We assessed 191 and 344 questionnaires collected in the year 2019 and 2020, respectively. The mean of co-teacher performances' score in conventional practicum was 3.997 out of 4, which was higher than its score in virtual practicum (3.841 out of 4, p<0>86%) responded "very good" (score 4) on the question "whether the practicum learning objectives could be achieved"? All item questions scored >3.6 (mean); however, some challenges during practicum in the pandemic era were identified, both practical (e.g., unstable internet connection) and substantial (e.g., inadequate prior knowledge of medications).

Students perceived both conventional and virtual practicum were adequately performed to achieve the learning objectives. Despite the good practice in virtual practicum, students prefer hands-on experience in pharmacology training.



Medical Education Research-7 PP6G005

Validation of an Instrument to Evaluate Factors Affecting Transfer of Training to Workplace After Faculty Development

Falahat Nasir, Tahira Sadiq RIPHAH INTERNATONAL UNIVERSITY

A robust Faculty development nurtures the future health professions education so as to improve health services and strengthen the existing knowledge, skill and behaviors of educators. Even after elaborate FD sometimes the desired outcomes are not achieved from training transfer. Thus we need to objectively evaluate factors affecting training transfer. The purpose of this study was to develop and validate a questionnaire to evaluate the scores of factors affecting training transfer (FATT) among health professions. The questionnaire was developed by item generation through interview with health professions and literature

review. The FATT was validated in terms of content validity through expert reviews.

Psychometric properties of the final instrument were assessed in a sample of 90 health professions with training experiences.

A mixed-method design combing a qualitative study with a quantitative procedure. The instrument to evaluate the factors Affecting training transfer (FATT) among health professionals was developed in two phases: Phase One for item generation and development of the questionnaire, through interviewing health expert and content validity testing by manager experts; and Phase Two for testing other psychometric properties, such as construct validity and internal consistency reliability after carefully calculating the exploratory factor analysis and confirmatory factor analysis. The study was approved by Ethical Review Board. FATT is a valid and reliable tool helping stakeholders assess the effectiveness of Faculty development after Training transfer among health professionals. Rectifying catalysts and barriers will promote training transfer effectiveness



Medical Education Research-7 PP6G006

Coping Strategies of Post-Graduate Medical Interns (A Literature Review)

Shamaila RIPHAH INTERNATONAL UNIVERSITY

Long & stressful working environment leads to lack of concentration, distress and higher level of fatigue leading to self-perceived medical error. Objective of this review was to find out various coping strategies used by post-graduate trainees of diverse specialities to overcome the effects of long working hours.

This literature review has been done on the protocol of PRISMA-P (preffered reported items for systematic review and meta-analysis protocol). A comprehensive literature search has been done to understand the impact of extended duty time, on doctors in training and finally the counter measures used by them. Data was collected from published research articles, on three data bases (Pubmed, Psycinfo, ERIC) and one academic search engine, that is, google scholar. All full text English articles published in peer-reviewed journals were included. Studies having qualsyst percentage of >60% or >0.6 score were included in literature review. Four main themes have emerged including problem/emotion based coping, maladaptive coping, coping at personal level and work related coping strategy. Studies showed that physicians used coping mechanism including acceptance, mindfulness, spirituality, taking breaks from work, socializing, provocative & leisure activities. Nevertheless, younger physicians with little job experience, circumvents avoidance oriented coping style. Physician manage their stress at indiviual level by strategic planning for future, taking time out, meditation, exercise, gratitude and healthy relations with friends and family, rarely, mental health care is required. Moreover, self sacrifices and re-balancing personal priorities were basic coping at work place.

A collaborated program of cognitive, behavioral, mindfulness and coping skills should be adopted, implemented and studied for residents both at under and post graduate level.



Medical Education Research-7 PP6G007

The Missing Link Between Delusive Intellectual Phoniness and Professional Identity Formation in Medical Students; An Explanatory Study

Muhammad Waqas Rabbani , Shabana Ali, Rahila Yasmeen and Usman Mahboob RIPHAH INTERNATONAL UNIVERSITY

The students start identifying themselves as medical professionals soon after they join a medical college. Being subjected to their new role a number of them may develop delusive intellectual phoniness, which may affect their professional identity formation. This study will explore the reasons for developing intellectual phoniness in medical students.

It will be a mixed-methods explanatory study, in which the students from clinical years will be screened to know if they have delusive intellectual phoniness (impostor phenomenon), using Clance impostor phenomenon scale. Through the cross-sectional survey, their Big-5 personality types will be identified. In addition, professional identity formation will also be quantified among medical students by combining multiple stage attribute-specific scales and development scale. The students with high levels of impostor phenomenon, a low score on professional identity formation and personality type of neuroticism will be interviewed to explore the factors which lead to delusive intellectual phoniness.

A correction will be established between the intellectual phoniness and personality type. This study will help us know if there is a correlation between intellectual phoniness and personality type, and also the factors behind it.



Medical Education Research-7 PP6G008

Level of Satisfaction and Perceived Learning Through Online Classes During Covid-19 Among Physical Therapy Students

Rafia Farrukh Shamsi, Anashra Shaeen, Aruba Saeed Riphah International University

Online classes are being conducted by the educational institutions to meet the needs of students in COVID-19 pandemic worldwide. This may have an impact on student's satisfaction levels regarding the online courses being taught. objectives: to determine students level of satisfaction and perceived learning through online classes during COVID-19 pandemic.

Online questionnaire about student satisfaction and perceived learning were developed to collect data about students perception of their online learning experience. A total of 232 undergraduate and postgraduate DPT students completed the survey. There were total 12 items and the survey asks students to mark on the most appropriate number on a three point scale where 1 indicates satisfied, 2 indicates somewhat satisfied and 3 indicates not satisfied. Student's responses were analyzed through SPSS ver. 22. Frequencies and percentages are calculated.

There were more females 94.8% as compared to males 5.3% who responded. Most respondent's 92.7% were 18-25 years old. 58.2% students communicated in class by electronic means and in addition online course stimulated the interest of 24.6%. Only 8.2%students learned the materials which were presented in the online course. 15.9% students had better understanding of the class content & 25.9% students were satisfied with the online course. 33.2% students didn't have any understanding of complex concepts.

Student's satisfaction and perceived learning with online learning during Covid-19 is low. Majority of students reported that learning during online classes is not as much as during face to face.



Medical Education Research-7 PP6G009

Training Needs Assessment: A Link to A Successful Faculty Development Plan

Shabana Ali, Raheela Yasmeen isliamic international medical college

In wake of COVID 19, a dire strait was faced as online teaching was a surprise for teachers. faculty training was mandatory to develop expertise for online teaching and assessment. The objective of the study was to determine the efficacy of training needs assessment to combat the immediate needs of faculty.

A descriptive survey was designed for specialized Training needs assessment (TNA). It comprised of four major group regarding training on use of IT tools, online learning environment, online assessment, and evaluation to assess training needs of faculty for better online teaching. TNA form was designed and validated by five experts in medical education. Data was collected through convenient sampling of 100 full time faculty members from basic and clinical science of Islamic international medical college by circulating TNA proforma through google doc. The responses were analyzed by using SPSS 21 to find out the frequency of responses for each section.

Data analysis revealed that 55%, 54%,64%, and 45% of faculty required training on MS teams, Moellim, Zoom, and Socrative for better online teaching. 55%, 63%, 57%, and 56% of faculty demanded training of online lecturing, conduction of CBL/Pbl, clerkship, teaching through the virtual patient. The medical faculty was more interested in training on the development of assessment items and conductions of online quizzes and assignments. More than 60% of faculty highlighted their need of training on online assessment of knowledge, skill and attitude, online quizzes, discussion forums, assignment with checking rubrics and evaluation of online module.

Training needs assessment helps effectively in assessing the training needs of faculty as it helps the medical education department to plan and implement a vigorous faculty development plan ensuring proper teaching and assessment.



Medical Education Research-7 PP6G010

Develop EPA of Forensic Dentistry

Saima Zafar, Rehan Ahmed Khan RIPHAH INTERNATONAL UNIVERSITY

Forensic Odontology is the recognition discipline based upon the revealing of inimitable characteristics exist in each individuals dental structures. In Pakistan, it is not taught on undergraduate level. Record keeping is poor due to which we face difficulty in identification of individuals in disasters and medico legal problems.

A Delphi method of consensus development was used, comprising three survey rounds. In Round 1, participants were asked to rate agreement/disagreement with different statements across different domains relating to definitions of, and approaches to, using data in the context of research. Participants were also asked to contribute further ideas in relation to these topics, which were incorporated as new statements in Round 2. In Rounds 2 and 3 the participants re-appraised their ratings in view of the group consensus. With an expert panel, this study was able to reach consensus on the majority of statements included in this study. NOT APPLICABLE

Exposure of forensic odontology to the undergraduates highlights professional obligation of dental documentation and its role in human identification and management of other medico legal cases including violence and trauma.



Medical Education Research-7 PP6G011

Anxiety and Practice Modification Due to Covid-19 Among The Rakcods Dental Students and Interns; A Cross-Sectional Study

Sharifa Jameel Hossain Rakcods

Dentists have fear of carrying infections to others, they should take strict personal protection measures to minimize dental procedure that may produce aerosols and reduce risk of cross infection of Covid-19. To analyze anxiety of getting infected among dental students while working during COVID-19 and evaluate students' knowledge about different practice modification

A cross-sectional study was conducted using an online survey among the RAK College of Dental Sciences clinical students and interns. Statistical analysis was performed using SPSS version 25. Descriptive statistic, chi-square test, T-test, and ANOVA test was done to analyse the anxiety.

A total of 188 participants from RAKCODS Students and interns submitted the questionnaire. Out of total participants 125 were female and 63 males. Regardless dental clinical years and genders 74.5% of participants were afraid of getting infected with COVID-19 from either coworkers or patients. In the present study significant difference showed (P0.026) between male and female of being afraid from carrying COVID-19 infections from their dental practices to their families.

Dental students are in a state of anxiety while working in the clinic due to the COVID-19.As healthcare professionals, dentists should explore long-term measures to avoid recrudescence and future outbreaks.



Poster Presentation 9: Medical Education Research-8 PP7F001

Focusing On Preparing Newly-Qualified Doctors for Their On-Calls

Faheem Malik Royal Berkshire Hospital

We noticed a problem with the teaching being given to newly-qualified Foundation Year 1 (FY1) doctors in our hospital; it did not focus on preparing them for on-calls. This resulted in reduced confidence, and a potential compromise to patient care. In response, we created a teaching course focused on on-calls.

We distributed a questionnaire to the 2019/20 cohort of FY1 doctors to assess their confidence in dealing with common conditions on-call. We then created a teaching programme focused on on-calls, and delivered it 8 months later to the new cohort (2020/21) of FY1s. Afterwards, we assessed this cohort's confidence in dealing with common conditions on-call. We directly compared the 2019/20 cohort's answers to the 2020/21 cohort's answers.

39 doctors from the 2019/20 cohort, and 18 doctors from the 2020/21 cohort responded to our questionnaire. We calculated an average rating for confidence in dealing with four different common specialties when on-call. The 2019/20 cohort (who had not attended our teaching course) gave an average rating of 2.09/5, while the 2020/21 cohort (who had attended our teaching course) gave an average rating of 2.90/5. We also assessed intracohort change in global confidence pre- and post-programme. The 2020/21 cohort gave a global confidence rating of 1.78/5 pre-programme, and 3.56/5 post-programme.

Providing newly-qualified doctors with teaching aimed at preparing them for on-calls increases their confidence in dealing with common on-call conditions.



Medical Education Research-8 PP7F002

Utility of A Webinar in Increasing Medical Students' Understanding of The Uk Academic Foundation Program (Afp)

Ioanna Zimianiti , Ben Sharp Imperial College School of Medicine

The Academic Foundation Programme (AFP) is the first step in the UK's national integrated clinical academic pathway. However, knowledge about the programme and the application process among medical students remains unclear. Amidst the COVID-19 pandemic, peer taught online webinars could increase senior medical students' understanding of this career path.

Medical students were invited to attend a free online Zoom webinar, designed and organised by the Imperial College 'Medical Education' and 'Research and Academia' societies. 5 speakers covered 6 main aspects of applying and succeeding in the AFP application. Notably, an interactive lecture on succeeding through and gaining the most out of the normal UK Foundation Programme, was also delivered. Students completed online questionnaires before and after the event (pre and post), which included Likert type rating scale questions. Feedback forms were retrospectively analysed using unpaired t-tests and a significance level of 0.05.

54 (45%) and 43 (35.8%) out of 120 attendees completed pre and post-event questionnaires, respectively. Following the webinar, students' knowledge on the structure of the AFP and confidence in succeeding in the application process significantly increased (p<0.000001). Interestingly, there was a decrease in the number of attendees agreeing that only the most academic students secure AFP positions, but no change in the number of students presuming that applicants must have multiple publications to secure an AFP place. 98% of participants preferred an online to in-person format, agreeing that the online interface enabled them to ask questions and engage more freely.

Online events constitute an engaging way to increase awareness and understanding of clinical academic pathways. Further studies could use paired data to directly compare attitude changes pre and post -event.



Medical Education Research-8 PP7F003

Exploring The Factors Promoting and Hampering Learning for Practice Through Virtual Communities of Practice in Orthopaedics Residents

Muhammad Imran Haider, Raheela Yasmin Riphah International University

The virtual communities of practice have didactical potential, yet VCoPs fail in enhancing the learning practices because of various factors in the virtual community which need to be explored. The working/learning environment in our offline physical communities as in the hospital setups is not very conducive for learning.

The theoretical frameworks used are 1. Theory of Connectionism. 2. Theory of Communities of Practice. 3. Situated learning theory. Study Design & Sampling: It will be a Qualitative Exploratory Study. Sample size will be-16 to 18 residents selected through Purposive convenience sampling making use of the inclusion/exclusion criteria. Data Collection tool: A new data collection tool/ Questionnaire will be formulated that is supported by literature.? Semi-structured interviews will be conducted for data collection.

Semi structured interviews will be conducted after formulating the data collection tool/ questionnaire after a through literature search. This tool will be pilot tested on 2 to 3 residents of orthopedics fitting in the inclusion criteria of sampling to check for easy understanding of questions/ concepts and the applicability of the tool. The interviews conducted will be recorded by two devices and later on transcribed and the transcription confirmed and validated. An inductive approach will be used for generating codes and the data will be analyzed using thematic analysis approach.

Virtual communities have almost replaced conventional communities. For the successful learning for practice in virtual communities, it is imperative to explore all factors which inhibit or promote learning in VCoPs.



Medical Education Research-8 PP7F004

Development and Validation of An Instrument To Measure Micro Learning Environment Of Dentistry Students (MLED)

Zainab Akbar, Rehan Ahmed Khan Riphah International University

There is no instrument present to measure micro learning environment of dentistry students. Despite having multiple instruments for measuring learning environments, all are lengthy and do not assess experiences of all learners. Objective of my study is to develop and validate an instrument for assessing the micro learning environment of undergraduate dentistry STUDY DESIGN: Mixed method study with sequential qualitative and quantitative sequential components(Exploratory design). SAMPLING **TECHNIQUE:** sampling(Qualitative), Simple random sampling(Quantitative) SAMPLING SIZE: • Sample size of students will be decided according to total number of items. (10 students for one item at least) • 6 to 8 final year BDS Students(FGD) • 7 to 8 medical education experts(semi structured interviews) • 10 to 12 research experts(content validity) INCLUSION CRITERIA: • Undergraduate dentistry students(final year)of three colleges of KP (RCD, KCD, Sardar Begum)and Punjab(AMC ,FF ,Riphah) EXCLUSION CRITERIA: • First, second and third year BDS Students. • Students who are not

DATA COLLECTION PROCEDURE: 1.Literature Review(themes Generation And Item Formulation) 2.Semi structured indepth Interviews(6 to 7 Medical Education experts)(MHPE or Phd,mini 5 years experience 3.Focus group discussion(final year BDS Students 7 to 8) 4.Questionaire formulation(Literature review+Interviews+FGD 5.Refined questionnaire sent to 10 to 12 experts for content validity 6.Response process validity .Questionaire administered as google forms to final year BDS students 7.Factor analysis and establishing internal consistency (final instrument). DATA ANALYSIS PROCEDURE: • Quantitative: Spss Version 26 • Qualitative: Data will be analyzed manually

Emerging trend of digitalization has reduced our concentration span to the extent that vibrant micro learning environments are need of the hour so all of its characteristics need to



Medical Education Research-8 PP7F005

Evaluation of E-learning course from faculty members' perspective

Maedeh Masoumipour, Javad Seyedhossein, Mahboobeh Mafi Nezhad, Mahtab Amini, Amir Ali Sohrabpour

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Instructor attitudes toward effectiveness of instruction and supports are effective factors in online education. Although most of studies about evaluation of E-learning courses are focused on student's satisfaction, tutor satisfaction is needed for better instruction. This study is aimed to evaluate the quality of E-learning courses from faculty members' perspective.

A cross-sectional survey was conducted at Tehran University of Medical Science. The questionnaire was designed based on the literature review and experts' opinions. Ten experts validated the questionnaire considering the clarification and importance of each item. Reliability of questionnaire was calculated by Cronbach's alpha coefficient (0.95). The valid 20-item questionnaire using a 5-point Likert scale was send to 1667 faculty members electronically. Addressed themes of the questionnaire is comprised attitude toward how much E-learning motivates instructor, how platform met the instructor's needs, and technical support quality. It was declared that personal information of participant will never publish. Overall, 747 faculty members from schools of pharmacy, medicine, allied medicine, dentistry, nursing and midwifery, health, rehabilitation, medical technology, nutrition and dietetics, virtual and language participated in E-learning courses' evaluation. 58% of the participants had not experienced E-learning before. 43.1% of the participants used the asynchronous elearning platform intended for sharing instructional materials. Specialized educational environments and Social Media were used as well. 68.70% of instructors were satisfied at Elearning experience. 67.39% of faculty members intend to use virtual learning in future and 69.58% of participants suggest e-learning. It was indicated that e-learning met the faculty member's needs and satisfaction.

According to the results, faculty members almost prefer to use asynchronous online education platform. Moreover, lack of former online education experience didn't have negative effects on instructor satisfaction.



Medical Education Research-8 PP7F006

Attitude of Final Year Students towards Dental Specialty, Subject Preference and Factors Influencing Their Decision

Sohaib Hassan Multan Medical & Dental College

The aim of this study was to find whether final year dental students want to do post-graduation and factors that governs their decision for specialization.

A cross-sectional survey was carried out on final year dental student with the help of a questionnaire.

The results showed that 40.8% of the students want to specialize in maxilla-facial surgery followed by orthodontics by 12.4%. 37.2% of the students want to specialize for internal satisfaction. 41. 6% student thought doing specialization would be too much time consuming.

It was concluded that orthodontics is the second preference for specialization as subject and the most common reason for specialization was talent in the field. The most discouraging factor.



Medical Education Research-8 PP7F007

The Effectiveness of Preceptor-Learner Collaborative Learning at The Inter-Professional Demonstration Case Discussion in A Medical Centre

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The demonstration case discussion is currently the most common interprofessional education (IPE) model. However, the effectiveness of the demonstration case discussion for preceptor-learner collaborative learning is still unknown. This study tries to explore the effectiveness of preceptor-learner collaborative learning at the interprofessional demonstration case discussion.

This is a correlation descriptive study. We attempt to develop the "self-assessment effectiveness scale of the Interprofessional demonstration case discussion" according to the IPEC four core abilities. The structured questionnaire contains background variables and self-assessment effectiveness scale. There are 16 items in the effectiveness scale. The average CVI scored by the experts was 0.93. There are two factors extracted by exploratory factor analysis, including Interprofessional observation (IPO) and Interprofessional application (IPA), and their total explanation variation is 68.61%. Cronbach's ? coefficient of the scale is 0.96. The results showed the effectiveness scale has good validity and reliability.

A total of 184 participants joined in this study in June-July 2020. The results showed the preceptors' scores are significantly higher than the learners. The preceptors' scores of most items are significantly higher than learners (p<0.05) except item IPA 7, IPA 8 and IPA 11. However, whether "preceptor-learner collaborative learn", whether "read the abstract in advance", and "the times of participation", there were no significant differences in the scores of each item. There is a significant difference in whether the personnel who read the case report before the meeting can actively participate in the meeting (F value=9.24, p= 0.004). The results show preceptors' self-assessment effectiveness is significantly higher than

The results show preceptors' self-assessment effectiveness is significantly higher than learners. Preceptors should take the advantages of their own experience guide learners to observe and apply in their clinical.



Medical Education Research-8 PP7F008

Ophthalmology Skills Based Education for Medical Students During COVID-19

Jacqueline Shaia Eastern Virginia Medical School

The decline in ophthalmology pre-clinical education is a concern, as it is essential for diagnoses of ocular emergencies and systemic diseases. Compounding this, is the global pandemic which has made specialty skills-based training more challenging. To combat these issues, a case-based webinar was created to teach ocular sonography and pathologies.

47 medical and pre-medical students recruited from the ophthalmology and sonography clubs attended this four-minute webinar. The webinar began with a five-question pre-test to establish base-line knowledge. Next, students were taught how to perform an ocular ultrasound. The clinical cases included retinal and vitreous detachments, vitreous hemorrhages, ocular traumas, idiopathic intracranial hypertension, and central retinal artery occlusions. After reviewing the cases, students completed the same four-question test as a post-test and were asked to complete an anonymous modified likert scale and open-ended question feedback survey.

The survey received a 66 percent response rate with students ranging in their perspective careers goals with 22 percent interested in ophthalmology or undecided. Only 5 percent of students had previously performed an ocular ultrasound. Overall, students' knowledge improved by an average of 30 percent. 96 percent of students strongly agreed or agreed that these skills would assist them in their future careers, while 100 percent requested more of these events in the future. Additionally, 83 percent strongly agreed that these cases allowed them to understand the clinical importance of developing ophthalmology sonography skills. Overall, webinars are a quick, effective way to expose and teach large student groups specialty skills when in-person education is not possible.



Medical Education Research-8 PP7F009

The Implementation of The Inter-Professional Collaboration Practice Core Competencies During The Collaborative Clinical Reasoning Discussion

Chaina Hanum, Ardi Findyartini, Diantha Soemantri Faculty of Medicine, University of Indonesia

Collaborative Clinical Reasoning (CCR) is a thinking process performed by interprofessional team to discuss patient's problems and its management. During the discussion, each health profession is expected to perform individual clinical reasoning and apply the core competencies of the Interprofessional Collaborative Practice (IPCP).

This is a qualitative study and aims to explore the implementation of the core competencies of IPCP during the CCR discussion performed by undergraduate interprofessional teams. This study was performed in an IPE program held by Health Science Cluster Universitas Indonesia, followed by all students in their last year of study enrolled in five faculties. A total of four observations of the CCR discussions and four focus group discussions were conducted to explore how students implement the IPCP core competencies during CCR discussions. Four in-depth interviews with the tutors were also completed as triangulation processes.

This study shows that all IPCP competency domains were applied during the CCR discussion, especially the roles and responsibilities and the teams and teamwork. The interprofessional students understood their own roles and responsibilities in managing health problems, as well as each health profession's different roles and responsibilities. However, the CCR discussion tend to be dominated by certain health profession who had bigger roles in the case management. They also realized the importance good leadership skills during the discussion. The leader needed to make sure that each team member actively participated in the CCR discussion.

CCR discussion can be used as a tool for interprofessional students to practice working in a team to manage health problems and apply collaborative competencies.



Medical Education Research-8 PP7F010

Instrument for Assessing Dental Faculty Perception of E-Educational Environment: Modified E-Learning Educational Atmosphere Measure (M-Eeam)

Falahat Nasir, Saima Zafar, Rahila Yasmeen RIPHAH INTERNATONAL UNIVERSITY

Background: Experiences in e-learning differs from face-to-face learning environment. A valid and reliable instrument was modified to assess perception of faculty in e-learning educational atmosphere. Objective: To evaluate E-learning Educational Atmosphere through dental faculty perception by using Modified E-learning Education Atmosphere Measure (M-EEAM)

Methods: A quantitative study employing the Modified E-Learning Educational Atmosphere Measure (M-EEAM) instrument was done with 40 faculty members Foundation University College of Dentistry & Hospital in 2020. The EEAM instrument was modified according to our culture and context. A pilot study of the 28 item question was distributed amongst 12 faculty members. The final instrument (M-EEAM), included 20 questions that covered six factors in a 6-point Likert scale. Instrument content and construct validity were assessed. Also Cronbach's alpha and test-retest were used for studying the internal consistency and reliability of the instrument. Data were analyzed by using SPSS software.

Results: The final instrument named 'Modified E-learning Educational Atmosphere Measure' (M-EEAM) consisting of 20 items covering six areas including Program Effectiveness, Teaching Quality, Ethics and professionalism, Learner support, Safety and convenience and Awareness of rules. A pilot study of the 28 item question was distributed amongst 12 faculty members, excluding 8 items with low construct validity in our context in culture. Content validity ratio was more than 0.52 and content validity index score of all questions was above 0.82. Testretest reliability was 0.82 (p=0.001) and Cronbach's alpha was 0.842 calculated after pilot study and expert validation.

Conclusion and recommendation: M-EEAM gives objectivity for evaluating dental faculty perception of the E-educational environment. M-EEAM is recommended reliable tool to measure the e-learning educational environment in our cultural context.



Poster Presentation 10: Medical Education Research (Student Session) PP7G001

Assessing The Mental Wellbeing of Medical Students During The Covid-19 Pandemic

Azka Qaiser, Sara Ahmad University Medical and Dental College, Faisalabad, Pakistan

Due to the coronavirus disease (COVID-19) medical education has been shifted to online classes. This research highlights the impact of the lack of practical performance, the transition to online education, lack of basic facilities for online education and the drastic spread of coronavirus on the mental health of medical students.

Our mixed-methodology study consisted of a structured questionnaire and interviews. After an ethical review from the IRB we circulated our survey amongst 10 students for a pilot study. The internal consistency was analyzed by taking Cronbach Alpha. The questionnaire was then emailed to all MBBS students (n=600) garnering 126 responses. First 19 questions were based on a likert scale followed by a solution-oriented multi-select question. Alongside, we interviewed 5 faculty members regarding the impact of Covid-19 on their students. Quantitative analysis was done by SPSS 22 whereas qualitative themes were analyzed by Atlas.ti with the aid of our supervisor.

Cronbach alpha came out as 0.67 proving the questionnaire reliable. 48.80% respondents claimed that e-learning worsened their mental heath, 28.80% and 18.40% were affected only slightly or reported no impact respectively. While 4.00% noticed improved mental health. 60.80% were more anxious for online exams. Contrarily, 18.40 ?lt more relaxed, 16.80?lt only slightly overwhelmed and 4% recognized no differences. Themes analyzed from the faculty interviews were as follows: 1. Decrease in overall psychological well-being 2. Difficult transition to online environment 3. Counselling for students with parental involvement 4. no work and home life boundaries

Covid-19 (illness, loss of loved ones, online education, financial instability) has impacted the mental-health of many students. Provision of gadgets, financial assistance, counselling and interactive sessions were suggested as solutions.



Medical Education Research (Student Session) PP7G002

Opinions and Perceptions of Pharmacy Students Regarding E-Learning in Karachi Pharmacy Academia In Current Pandemic Crisis

Amber Nawab Jinnah University for Women

Study appraises the opinions and perception of pharmacy students in Karachi Pharmacy Academia regarding E-Learning during this pandemic; as world is shifting on virtual level many events are going online so as education, through this research we are evaluating mental comforts of students and their perception on e-learning.

To fulfill our objective we have designed a survey which was circulated in different pharmacy academies of Karachi, using different social media forums and manually too. The main parts for evaluation includes demographic feature, attitude of student with respect to e-learning, their knowledge, their perception and lastly their mental comfort regarding e-learning.

We have collected total 201 responses of students belonging from different Pharmacy academia of Karachi, regarding e-learning. 88.58% (n=178) were students and 10.94% (n=22) were graduates. We have evaluated using different statistical tools, regarding perception of students on e-learning and their mental health regarding it as well. The results shows that mostly students are still struggling to adapt e-learning system, mentally many students are not comfortable and showing stressful behavior towards e-learning.

The study concludes that adaption of this new system among students especially undergraduates is not successful, while students in higher professional are dealing in comparatively quite positively.



Medical Education Research (Student Session) PP7G003

Viewpoints of Medical Students of Islamic International Medical College regarding their engagement in Medical School Curriculum

Muhammad Abdullah, Raheela Yasmin Islamic International Medical College

The ASPIRE Criteria for Recognition of Excellence in Student Engagement in a School have already been established by the ASPIRE Program, a project of AMEE. This study examined how the students of Islamic International Medical College, Rawalpindi, Pakistan viewed their involvement in their medical school's curriculum planning, evaluation.

This study is a quantitative descriptive survey limited to the responses of medical stu- dents of IIMC in the 5 years MBBS Program. 191 medical students, out of a total of approximately 500, from the MBBS Program participated in the online survey. This sampling was done by a non-probability convenience technique. The Responses were collected in the duration of 8 consecutive days. Each section of survey catered a par- ticular criterion set by ASPIRE. Majority of the questions (34) gave students the option to respond according the Likert scale. Few questions (4) were framed to be open-ended.

Response rate was 38.2%. Out of which, 46.5 ?lieved that their medical school currently adheres to the ASPIRE Criteria of Student Engagement. 81.4% expressed that students should formally engage in their medical school within the domains of ASPIRE Criteria. 56.3?lieved that students participated in provision and evaluation of the school's education. 53.8% implied they have opportunities to engage in the academic community. However, only 31% indicated that students engaged in policy and decision-making activities at their school; rest disagreed or stayed neutral. Mentorship for research activities and a stronger representation in planning extra-curricular activities were popular opinions.

The ASPIRE Criteria of Student Engagement are perceived as a prime benchmark by medical students of IIMC. These criteria can be utilized to make medical education more intuitive and beneficial.



Medical Education Research (Student Session) PP7G004

Evaluation of Efficacy of 'Student Support System' In A Medical University in Pakistan

Hafsa Shahid King Edward Medical University

Medical students constantly face substantial amount of stress and anxiousness regarding issues of academic and non-academic sorts in their instituitions, due to competitive environment, compared to the students from other instituitions. The student support system is a program which acts on a set of guidelines formulated by each institute.

The method which we used for the evaluation of student support system was a survey form which had been designed online, and then was disseminated to the sample population of currently enrolled undergraduate medical students at King Edward Medical University by 'Snowball Sampling Technique'. The sample size of target population was calculated to be 268 by using the WHO sample size calculator. The questionnaire was divided into sections which aimed at analyzing the availability, accessibility, serviceablity and satisfaction on Student Support System. The answers collected were processed according to different percentage of participants and a generalized conclusion was extracted out.

Out of the total sample population of 268 students, around 39% (105) of the participants had substantial knowledge about the availability of student support services executing in the university premises. About 15% (40 participants) availed the facilitation at least once from support in their undergraduate tenure. 72% (192 participants) were satisfied with the orientation provided at the first day of university. 20% (53 participants) were satisfied with problem solving attitude and serviceability provided by the counselling service of the student support system. Around 43% (115 participants) reported that their various academic issues were resolved after they contacted student support center.

Student support system is cornerstone for the facilitation of students, as it contains qualified-professionals. We recommend that proper awareness regarding its services must be done at various levels in university.



Medical Education Research (Student Session) PP7G005

Awareness Among Physicians and Medical Students of Pakistan Regarding COVID-19: A Questionnaire Based Online Survey

Muhammad Shafeh Shehzad, Saqib Jan Shah, Muhammad Usayd Khan, Muhammad Awais Sultan, Haris Khan, Anas Javed, Syed Musa Haider.

Islamic International Medical College

The purpose of our study is to assess the awareness among healthcare professionals and medical students of Pakistan regarding COVID-19. Our data will be useful for the authorities to check if the medical students are ready to serve as a frontline force.

In this cross-sectional study, physicians and medical students of government and private sector hospitals and universities across Pakistan were included. The questionnaire was distributed through an online forum. Convenience sampling was done. The Confidence level (CI) of 95% was set with 5% margin of error. Demographic data was noted. Data was evaluated using SPSS version 21. Chi-square statistics was utilized to evaluate the relations. A p-value of less than 0.05 was deemed statistically significant.

There was a total of 400 responses of our questionnaire. The number the physicians participating in our research was 200 (50%) and 200 (50%) students contributed in our study. The total response of 10 questions in our research is 4000 out of which 2730 (68.25%) are the correct responses. By evaluating the responses on the bases of profession, 1281 (46.9%) responses of the physicians while 1512 (55.3%) responses of medical students were correct. To face this pandemic, adequate amount of knowledge is needed specially of the frontline workers. More responsiveness is needed in this regard to tackle this pandemic efficiently.



Medical Education Research (Student Session) PP7G006

Health Literacy & Patient's Satisfaction

Arij Ramzan, Miss Ume Amen Dow University Of Health & Science

- Background: Patients are the most important stakeholders of the healthcare industry. The services and the Doctors of hospitals measure the satisfaction of patient's which will further identify that the patient's are satisfy or not with the services of hospitals and the treatment provided by the Doctors. That is why the healthcare providers always focus on the patients satisfaction and work incredibly for the satisfaction of their patient. Aim and Objectives: The study mainly focuses to evaluate the impact on patient satisfaction due to inadequate Health Literacy level (Health information, Shared decision making and Disease knowledge). To evaluate the relationship between insufficient Health Literacy level (Health information, Shared decision making and Disease knowledge) and patient satisfaction.
- Methods: Quantitative research method was used in this research. Using an exploratory method to analyze the impact of health literacy on patient's satisfaction. As the population frame is wide and infinite. Data was collected through face to face by visiting Dow University Hospital & Liaquat National Hospital. In this research, data was collected through questionnaire and with closed ended questions and questionnaire was distributed among respondent. The whole process for data collection took 15 to 20 days to finalize for statistical analysis. Survey was conducted from total 50 respondent's, patient's of Karachi from Liaquat National & Dow University Hospital through convenience sampling method analyzed on SPSS software 22.0.
- Results: The outcome of Pearson correlation was as high as (R= 0.434) of Patient's Satisfaction and as low as (R=0.211) of Shared decision making. Similarly, the rest of the correlation values are lesser than 0.90 and greater than 0.30 indicating that the constructs are unique and shows that health literacy has significant impact on patient's satisfaction. The results of the regression analysis for the overall is 53.1% of the variance (R2=.531) which predicts that there is a significant relationship between the independent and dependent variables. According to the result, patients are more satisfied if they have disease knowledge and can communicate well.
- Conclusion and Recommendations: This paper will be helpful for health care providers and hospitals who wants to keep their patients satisfied. Future research could be to further investigate the impact of health literacy on patient's satisfaction taking more variables of health literacy to test the relationship. Further research may conduct by increasing the sample size and on different population.



Medical Education Research (Student Session) PP7G007

Students Perspective On Rethinking Medical Education for Pandemic Preparedness

Maryam Jabbar, Naseer Fatima The University of Faisalabad

Background and Aims: To assess the difficulties, face by students during online acdamic sessions. To judge the preparedness of students for online education in wake of the COVID 19 situation. To analyze what sort of study strategies they would prefer in the future.

Methods: Data were gathered using a self-made questionnaire. All the data were entered and analyzed using Statistical Package for Social Science (SPSS Version 22.0) Descriptive analysis was applied on qualitative variables. Chi-square test was applied to compare qualitative variables.

300students participated in study.89%think covid19 adversely effect their well-being.76.8%think physical campus academics must preferred over online under properly safety measures.60.8?el assignment at the end of every class are necessary to achieve learning.70.6%like to spend 4hrs perday for online classes.83.1%think more addicted to electronic devices due to online classes.66%expect course instructor to conduct class daily. They preferred Google Classrom as an LMS and also wanted material on University website. Synchronous live teaching was preferred by 63.9%.Wants more time to complete assignments.68%wanted a break of atleast 15minutes between lectures. 46% wants nature of exams subjective ,32% wants objective while 22% both.

For pandemic preparedness, suggested that online classes given relaxation in between, they reported feeling low, having developed "gadget addiction" which needed to be curbed by allowing live in campus sessions with safety measures.



Medical Education Research (Student Session) PP7G008

Psychological Effects of Covid-19 On Healthcare Students and Outlook On Online Therapy

Muhammad Hasanain , Annas Ghafoor, Urooba Jawwad, Sakina Mansoor, Eraj Bakhtawar,
Asma Faisal, Imaduddin Sawal, Naseem Ahmed
Dow Medical College, Dow University of Health Sciences

The ongoing SARS-Cov-2 pandemic has severely affected all educational activities, leading to a significant detrimental psychosocial impact on students. Therefore, in this study we assessed the cognitive impact of the pandemic and explored the perceptions pertaining to available telemental health services. in medical undergraduate- college students from Karachi, Pakistan.

In this cross-sectional study, an online survey which catered to demographics, GAD-7 scale, and perception towards and likelihood to avail online therapy was distributed in July 2020. Health care students enrolled in Dow University of Health Sciences were included in this study. The sample size was calculated using OpenEpi with the anticipated prevalence of anxiety taken as 50% and the confidence interval set at 95%. A total of 412 students were included. Data was analyzed using SPSS version 25.0 and a p- value less than 0.05 was considered as significant. Descriptive tests, Mann-Whitney U and Spearman rank correlation were performed.

The mean GAD-7 score of the participants was 8.0 ± 5.4 , with 72.1% of the study respondents suffering from some degree of anxiety, reflecting a significant psychological impact. Our study observed a significant and positive association between social support (p=0.006), reduced social interaction (p<0.001) and academic interruptions (p=0.015) with increased anxiety levels. While increased severity of anxiety, increased social isolation, and inability to effectively perform personal and professional activities were all significant motivators to pursue online therapy, depersonalized nature of these virtual sessions (38.0%), privacy violations (28.7%), perceived lack of availability (21.2%) and cost (12.0%) hamper its effective utilization.

The Government needs to effectively work towards a workable solution to streamline telemental health services and address the academic disruptions by improving e learning infrastructure.



Medical Education Research (Student Session) PP7G009

A Threatening Rise in Melancholic Stages Among Young Generation: Is It Pandemic or Something Else

Javeria M. Rafiq Sheikh Jinnah University for Women

The main objective of our survey is to observe the depression in among young generation especially students of our society, with respect current pandemic condition, that how this situation is especially effecting student mindset along with that also how we can combat with it, through available non-pharmacological options to comprehend

The study comprises of two phases. Phase 1 and phase 2. The phase 1 was mainly dependent on cross-sectional survey study where we have observed the depression among young generation, specifically students in our society, using Hopkins scale 10 to evaluate the stage of depression with respect to symptoms observed. Phase 2: study mainly provides or deals with non-pharmacological solution to combat depression, which includes; physical therapy, communication therapy, mental therapy and through diet.

The result shows that, depression is mainly rooting itself in our society especially among young generation, especially in current pandemic situation, the current system of education the stress to cope with it, along with facing COVID-19 fear has shown increase in depression and feeling of hopelessness among young generation but there are many non-pharmacological solutions which can combat with depression and may heal a person of its depressed state. The results are very evident in terms of treatment.

It has been concluded through this study that there are different non-pharmacological solutions to combat depression, and can heal an individual when dealt correctly.



Medical Education Research (Student Session) PP7G010

Comparison of Quality of Life Of Medical Students In Annual And Modular System In Public-Sector Medical Colleges

Ayema Haque, Ayema Haque Dow Medical College

The aim of our research was to measure the quality of life (QoL) of medical students enrolled in MBBS program and compare it among modular vs. annual system of curriculum in public sector medical colleges. We also aimed to assess the variations and changes of QoL throughout medical school.

A cross-sectional study was carried out, including 404 students of three different public sector medical colleges in Karachi. The study was conducted from October 2019 to March 2020. QoL was measured using the WHOQOL-BREF questionnaire, which comprised of 26 items. Data analysis was done via SPSS v.20. Kruskal Wallis test and Mann-Whitney U test was used to compare scores among different years of medical study and between different curricular systems, respectively.

Out of 404 students, 81.3% were females, 18.3% were males. The mean age of the sample was 21.23±1.29 years. According to the year of study, significant differences were observed in physical health and overall QoL domain (p<0.05), with 3rd-year students having the highest scores. When comparing annual and modular systems, the modular system yielded a better QoL with a mean score of 83.34. The overall QoL of students in clinical years was found to be significantly better (p<0.05) than the students present in preclinical years.

The study showed that the overall QoL score in the modular system was better than the annual system and that third-year students had the highest the highest QoL.



Medical Education Research (Student Session) PP7G011

Perception Towards Online Classes During Covid-19 Among DPT Students

Zainab Azeem, Zainab Khalid Riphah International University

Online classes include teaching and learning integrated by internet connection. As pandemic hits the globe everything gets disturbed. As a safety protocol, online classes was incorporated in educational institutions to reduce the educational loss. This study was conducted among DPT students to access their level of perception towards online classes.

A simple online study was conducted among 303 DPT students through an already developed questionnaire from a study conducted on 2020 Oct 30 in Nepal. Questionnaire was developed on Google forms. Data collection was done by online survey. Questionnaire consists of socio-demographic and online class related data. Likert scale was utilized to analyze the perception of the students. Data collected was analyzed by implementing a simple descriptive statistical method using Statistical Package for Social Science (SPSS) version ibm24.

The statistical analysis indicates that 89.1% students have not received online classes prior to this pandemic. 73.6% of students reside in urban areas, most students (52.5%) use not only mobile but laptop and computer to attend online classes, 68.3% students have sound internet connection and 88.4% students have internet facility available at home. More than half (55.1%) of students think that online learning should be continued during this pandemic. Yet most of the students (49.5%) were less satisfied from online classes using ZOOM/MS teams.

Results indicate that most students have negative perception because of lack of interaction, concentration, understanding and technical know-how. Hence, face to face interaction and providing recorded lectures can prove beneficial.



Poster Presentation 11: Medical Education Research (Student Session) PP1F001

Online Teaching and Learning Challenges

Anila Amin Khattak, Soma Malik HBS Medical and Dental College

Coronavirus disease, caused by SARS-CoV 2, started in Wuhan, China, brought unaccustomed health and educational crises. It was declared as a pandemic by the WORLD HEALTH ORGANIZATION in March 2020. All the areas of life, including education, got adversely affected by Covid 19. This study aims to highlight the main challenges.

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About 58.1% of students reported unavailability of study related material as the major issue. 56.2% of disciples have also reported limited access to the teachers. Loss of interest due to poor internet connection was highlighted by 45.7% of students. Also, practical activities have reduced considerably reported by 47.6% of students. Besides technical and learning issues, online learning has created health-related issues as well. About 54.3% of respondents reported that Increased exposure to screen has impacted the eye health. As well as, 41.9 ceconnectivity issues often. On an average each student is spending more than 4 to 5 hours. Hence, this study has highlighted that not only the students are experiencing a hinderance in their educational advancement, but their health is also deteriorating.



Medical Education Research (Student Session) PP1F002

Merits and Demerits of Central Induction Policy in Punjab Province- A Mixed Methodology Study

Maliha Nadeem Services Hospital Lahore

Central Induction Policy is recently implemented for induction of doctors for post-graduation training based on their performance in MBBS, post-graduation entrance exam, housejob, studying in public institute, work in periphery, research. Objectives were t0 determine the perception of Central Induction Policy among residents and to determine its merits and demerits.

An interview based qualitative study was conducted in four Tertiary care hospitals of two cities of Punjab. Request forms were randomly sent to 75 residents inducted through and before CIP. 39 residents participated in the study after giving consent. Interview questions were selected by the researcher's team after detailed discussion. Each interview was heard thrice; manuscripts were prepared in the same words used by the participant. Manuscripts were discussed among the team members and themes identified. Depending upon themes questionnaire was designed and quantitative data collected through Google forms and simple percentages were calculated.

MERITS:1) The policy is merit based and everone gets a fair chance of induction. 2) All slots are paid. 3) Primary health care centers are being filled by qualified doctors. DEMERITS:1) issues with choice of speciality and place of work. 2) Delay in start of training due to various factors. 3) Discrepancy in special cases like wedlock, FMGs, authenticity of Research papers. CIP is a good initiative and is acceptable due to its merit based policy and financial security however some aspects need improvement like research, choice of speaciality etc



Medical Education Research (Student Session) PP1F003

The Covid-19 And Its Impact on Public's Mental Health

Fajar Fatima, Misbah Ghous Riphah International University

Outbreak of Covid-19 in the 21st century and its spreading around the globe is badly impacting on public's mental health. Although resources and psychological support provided to the people to reduce the risk of the pandemic by the government but still people are in state of fear, stress and consciousness.

An online questionnaire was used as a research source to gathered data from different people of different mind sets including student community working community and common people of our society. It was a cross sectional study conducted on 20th December. The Warwick-Edinburgh Mental Wellbeing Scale(WEMWBS) was used with few more questions. The demographic data is reported on the basis of percentage of public's responses.

Total 302 participants responded with mean age (30.21+-4.21) out of which 80.1% were students, 7.6% were working men, 10% were working women and 2.3% were unemployed. 24.6% were males and 72.1% were females. With the mean scoring (45.77+-9.96) of WEMWBS. It was reported that 54.2% claimed that they rarely lost any of their friends and family member. 31.6% were in fear of losing their friends and family. 18.6% were often worried about the fear of not having food during pandemic.15% people have lost interest in people. 11% rarely had suicidal thoughts during pandemic and 22.9% were rarely afraid of corona virus.

The Covid-19 affected mental health of public very badly and it' almost same in all countries. People are facing mental health issues due to the pandemic all over the world.



Medical Education Research (Student Session) PP1F004

Challenges Faced DPT Students in Online Examination in Covid-19

Maryam Asif Malik , Dr Misbah Ghous, Dr.Zainab Tariq
Riphah international university

Background: The global pandemic of COVID-19 has infected every region of the world. Human life, including medical education, has culminated in the suspension of face-to-face instruction in medical schools across the world. AIM: This study aimed to highlight the challenges and obstacles of online examinations faced by doctor of Physical therapy

The analytical cross-section study was conducted from December 4th to December 28th 2020 in different medical colleges of Rawalpindi and Islamabad in Pakistan. Data was collected through Google online forms. Demographic data was recorded. Bivariate correlation analysis was used to determine association between different variables.

Of the 220 students 66 (30%) were males and 154 (70%) were females. The overall mean age is 20.85 ± 2.21 . Range is 18-25 years. Overall,88% students were not satisfied from online exams and 11.8% were satisfied with this online system. Whereas, 68.2% were complaining about biased grading and 31.8% were in favour of it. From clinical point of view 45.5% students were agreeing with online learning while 54.5% were denying online clinical learning. On other hand, the less interaction between teacher and student affected 31.8% students and 68.2% were not getting affected with the less interaction of the teacher.

The impact of COVID-19 on online examination of DPT student has been significant in Pakistan. Our study showed that majority of the students were not satisfied with online examination system



Medical Education Research (Student Session) PP1F005

Knowledge, Attitude and Perception of Pakistanis Towards Covid-19; A Large Cross-Sectional Survey

Rubaid Azhar Dhillon, Amna Malik, Safia Awan Islamic International Medical College Riphah University

The Coronavirus-Disease (COVID-19) has created havoc globally as countries worldwide struggle to combat this pandemic. Since prevention and social isolation are known to be the only ways to prevent the spread of COVID-19, this has created challenges among the lower-middle income-countries (LMIC) including Pakistan battling between under-resourced healthcare and economic-shutdown.

A pre-validated online questionnaire was distributed among the general population of Pakistan from 1st to 12th June 2020. Descriptive statistics were analyzed using SPSS v25. Adequate knowledge was assigned as a score of >4 (range: 0-8) and good perception as a score of >3 (range: 0-5). Chi?square test was used to determine the significance of difference in knowledge and perception of COVID-19 with socio-demographic characteristics. Logistic regression analysis was run to identify factors associated with adequate knowledge and perception. P < 0.05 was considered as significant.

A total of 1200 respondents participated in this study with a wide range of age groups and education. Majority of the respondents had adequate knowledge (93.3%) with a mean score of 6.59 ± 1.35 , and good perception (85.6%) with a mean score of 4.29 ± 0.82 . Significant differences in knowledge and perception were observed among genders, age groups, education and between students and employees in the healthcare and non-healthcare department. A multivariate analysis revealed a higher educational status and female gender to be significant predictors of adequate knowledge and perception.

An overall adequate-knowledge and good-perception towards COVID-19 is present but preventive protocols and dissemination of correct information through conducting educational-interventions are needed that target safe-health practices and prevent the spread.



Medical Education Research (Student Session) PP1F006

E-Learning Challenges and Coping Strategies of DPT Students During Covid-19

Mahnoor Iqbal , Maria Saeed, Suman Sheraz Riphah International University

With the declaration of COVID-19 as a pandemic by WHO in March 2020, the educational institutes all across the world shifted from on campus to online learning. The objective of the study is to explore the E-learning experiences of DPT students during COVID-19 pandemic. This study was conducted using a qualitative study design. Focus group interview was conducted from 6 students including both male and female participants who are currently enrolled in DPT program at Riphah International University. The participants were selected based on their GPA including both high and low achievers. In depth interviews were done with audio recording. The data was transcribed, coded and analyzed through thematic analysis via Atlasti software.

Students highlighted that the most troublesome issue was network connectivity issue. The other challenges identified included the overburdening of students with quizzes and assignments, lack of interaction, lack of motivation, technical issues, and no expertise in practical subjects. Students adapted many strategies to overcome these challenges, like use of mobile network for internet, use of internet for learning practical skills and self-directed learning.

Online education saved future of students but there is huge difference between traditional face to learning and online learning. Adapting alternate strategies to overcome challenges can improve outcomes of E-learning.



Medical Education Research (Student Session) PP1F007

From Lockdown to Letdown: Medical Educators Perception Of E-Learning In Post-Covid Era

Sumaiya Shehzad, Misbah Ashraf, Aruba Saeed RIPHAH INTERNATIONAL UNIVERSITY

Purpose of this study is to find out the medical educator's perception of changes brought in e-learning, in post-Covid era Objective: To determine the medical educator's perception about online teaching, in post-Covid era.

We developed a questionnaire via. google forms. It consisted of a total of 20 questions (17 close-ended and 3 open-ended questions) and an option for providing personal emails, for those interested in knowing the outcome of research. The questionnaire was circulated on online platforms, among medical educators of various institutes. RIPHAH international university, SZABIST etc. A total of 85 responses were obtained, which included medical educators of various fields of medicine. The obtained data was analyzed using SPSS version 21

The changes the educators expect in educational practices in the post-COVID-19 world are reshaping the (75.3%) educators expected that their competencies will undergo a paradigm shift in education, 85.9?ucators expected that there is increased need of integration of more courses about online learning into the curricula, increase in students' motivation towards learning upon returning to schools/universities, 70.6?ucators expected that role of educators is shifting from teaching to facilitating. On the other hand, 84.7educators don't expect that there is decrease in the need for formal/face-to-face education, fewer educator appointments by the government upon returning to universities.

Thus, post-covid era education style and environment will go about a drastic change. Showing that education is expecting that their skills are going to be changed.



Medical Education Research (Student Session) PP1F008

Challenges and Perception Of Dpt Undergraduate Students Towards E-Learning During Covid-19

Zainab Azeem , Zainab Khalid, Aruba Saeed Riphah International University

As pandemic hits the globe everything gets disturbed. As a safety protocol, online classes or virtual learning was incorporated in educational institutions. Objective: to determine the degree of challenges DPT undergraduate students are facing towards e learning and to determine their level of perception towards online classes during COVID-19.

A simple online study was conducted among 303 undergraduate DPT students. Questionnaire was developed on Google forms. Data collection was done by online survey. Questionnaire consists of socio-demographic and online class related data. Questionnaire was developed on Likert scale to analyze the perception of the students. It was of 5 point scale, where 1 represents strongly disagree and 5 represents strongly agree. Data collected was analyzed by implementing a simple descriptive statistical method using Statistical Package for Social Science (SPSS) version. 24.

The statistical analysis indicates that 89.1% students have not received online classes prior to this pandemic. 73.6% of students reside in urban areas, most students (52.5%) use not only mobile but laptop and computer to attend online classes, 68.3% students have sound internet connection and 88.4% students have internet facility available at home. More than half (55.1%) of students think that online learning should be continued during this pandemic. Yet most of the students (49.5%) were less satisfied from online classes using ZOOM/MS teams.

Most students are facing great degree of challenges like lack of connectivity or sound internet facility at home and students also thought that interaction, concentration, understanding during E-learning is less.



Medical Education Research (Student Session) PP1F009

Test Anxiety Among Undergraduate Physical Therapy Students Taking Online Assessments During The Covid-19 Pandemic

Hafsa Javed, Anum Azeem, Mehreen Akram, Sarah Ehsan Riphah International University

The global shift of education towards online mode during the COVID-19 pandemic has become a challenge for both the teachers and students. The virtual learning and assessments pose a different kind of pressure on the students as compared to the traditional classroom learning and tests.

This cross-sectional survey was conducted on a sample of 312 undergraduate physical therapy students selected using convenience sampling technique. Data was collected from government and private physical therapy institutes of twin cities Islamabad/Rawalpindi. Students from all the semesters taking online assessments were included in the study. Test anxiety was measured using the Westside test anxiety scale which is a 10-item questionnaire. Data was analyzed using SPSS version 23

Mean age of the respondents was 21.28±5.1. Most of the respondents (75.6%) were females. The majority of the participants (54.5%) were from semesters 1 to 5. The prevalence of extremely high-test anxiety was 30.1% and moderate test anxiety was reported by 23.7% of participants. Only 7.4% of students reported comfortably normal test anxiety

The prevalence of test anxiety with online assessments is high among undergraduate physical therapy students. Most of the students had anxiety ranging from moderately high to extremely high with online



Medical Education Research (Student Session) PP1F010

Learning Strategies and Motivation in Online Education: A Survey On The Undergraduate Physical Therapy Students

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Student motivation is an important determinant of academic performance. Teachers can employ a variety of extrinsic motivators in the usual physical classrooms. However, they have fewer opportunities to keep the students motivated in a virtual learning environment during the COVID-19 pandemic. Intrinsic motivation is a key factor to ensure good

A cross-sectional survey was conducted on undergraduate physical therapy students from institutes of Islamabad/Rawalpindi. A sample of 305 students was selected using convenience sampling technique. Learning strategies and student motivation were determined using the 44-item Motivated strategies for learning questionnaire (MLSQ).

The mean scores for motivation subscales i.e. self-efficacy, Intrinsic value, and test anxiety were 34.65±11.4, 39.83±12.13, and 17.93±5.81 respectively. For the subscales of learning strategies, the average values were 62.28±17.04 and 40.88±10.85 for cognitive strategy use and self-regulation respectively. Statistically significant differences (p-value<0.05) were observed between the motivation level of males and females with males having a higher mean value as compared to females. The Differences in learning strategies were statistically not significant (p-value>0.05) between males and females.

Undergraduate physical therapy students show average levels of self-efficacy and intrinsic values in online learning and high levels of test anxiety. Cognitive strategy use and self-regulation were also reported to



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