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PLENARY SESSIONS

PLENARY SESSION 01:

Title: The WFME Basic Medical Education Standards on the Horizon 2030.

Speaker: Ricardo Leon Borquez

Institute: Universidad Autónoma de Guadalajara, México.

Abstract: In 2020, WFME published an updated third edition of the Global Standards for Quality Improvement in Basic Medical Education. These are a global consensus of medical education experts on minimum requirements for best practices (core standards) and standards for quality improvement. The 2020 edition of the standards adopts a new "principles-based" approach to allow users of the standards to make their own version of the core standards, appropriate to the local context. There are many sets of standards in local use that were developed from the first and second editions of the WFME standards for basic medical education. If those local standards are still good and effective, there is no

Need to revise them.

The standards are not a universal core curriculum and do not define the detail of educational content. Diversity of educational programs should be encouraged, to consider different educational, social, economic, and cultural conditions, different disease patterns, and to support social responsibility. The standards provide a template for medical schools and other medical education providers, as well as accreditation agencies, to define institutional, national, and regional standards and act as a platform for quality improvement. Not all WFME standards will be relevant in all settings.

WFME recommends the use of these standards to institutions responsible for medical education:

- As a framework for curriculum development, modified or supplemented according to regional, national, and institutional needs and priorities.
- To formulate individual change plans for quality improvement.
- To establish a system of evaluation, accreditation and/or recognition that guarantees minimum quality standards for programs.
- To safeguard the practice of medicine and a globally mobile medical workforce.

The standards are organized into eight universal themes: mission and values; curriculum; assessment; students; faculty; educational resources; quality assurance; and governance and administration.

Title: New Perspectives on Medical Education in The Modern Era

Speaker: Garay Chingiz Garaybayli

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

In today's rapidly evolving educational landscape, the role of high-quality education with an individualized approach in fostering the discovery of students' talents and the development of their skills has become increasingly significant. Such an approach offers a great stimulus for the development of their personality while providing them with promising prospects. Azerbaijan Medical University strives to enhance the existing educational programs, create new ones, and improve teaching and assessment practices to provide students with ample opportunities.

The impetus for change and innovation comes from various sources, including societal and patient expectations. Generating new perspectives and approaches requires a scientific and creative approach, as well as the application of proven strategies and methods

such as the David Gleicher formula. This formula establishes a link between changes and the level of dissatisfaction, the vision for the desired outcome, and the process required to achieve that vision, resulting in a value that outweighs the costs. Successful changes may also require individuals to embrace a mindset of continuous learning and adaptability to maximize opportunities for progress and development. While innovation and change can be challenging, the development of universities relies on them. Five years ago, the idea of nurses earning bachelor's degrees, defending theses, and becoming professors was unimaginable in Azerbaijan. Similarly, the opportunity to develop communication skills through virtual simulators was not even a consideration. However, the implementation of flipped classrooms and personalized student advising illustrates how unexpected changes can have surprising benefits.

To secure a better future, individuals must courageously embrace change, actively seek out learning opportunities, and benefit from existing resources.

PLENARY SESSION 02:

Title: Best Practices in Medical Education Accreditation: Lessons Learned and Future Directions

Speaker: Ismail Ibrahim Matalka

Institute: Ras Al Khaimah Medical and Health Sciences University, United Arab Emirates

Abstract: Accreditation systems in medical education aim to assure various stakeholders that graduates are ready to further their training or begin practice and has become as one of the most useful and efficient tools of program outcome monitoring and evaluation. Although most medical education accreditation systems apply similar standards domains and process elements, there can be substantial variation among accreditation systems at the level of design and

implementation. However, literature examining the effectiveness of different approaches to accreditation appears to be scant and limited. Traditionally accreditation included a more quantitative rather than qualitative judgment of the educational facilities, resources and teaching provided by the programs. As medical education moved toward outcome-based education related to a broad and context-based concept of competence, the accreditation paradigm has changed accordingly.

Although there are many frameworks for accreditation design, they are often restricted to one phase of the medical education continuum. The World Federation for Medical Education (WFME) Recognition Criteria for Agencies Accrediting Medical Schools stands currently as one of the most widely used designs. WFME has emphasized that the standards are a guide to the development and evaluation of medical education in all settings. They are not prescriptive, and not a rulebook. They are intended to be used as a framework to be modified and customized for the local context. In 2023, WFME has also published revised WFME Global Standards for Quality Improvement: Postgraduate Medical Education. These standards are also principles-based approaches that allow institutions to make their own set of standards that is contextually appropriate.

While there is some global variation in experts' opinions of accreditation standards, certain standards are considered essential. The consensus on these standards will constitute the basis of best practices for medical education accreditation systems. There are many lessons learned from designing and implementing different local and global systems for medical education accreditation which will be discussed during the presentation.

In the era of artificial intelligence (AI) and

precision and deep medicine; the new medical schools need to be technology empowered with smart and flexible design (Less auditoria and more small discussion rooms), and rich in simulation and virtual reality infrastructure (Cyber School). This paradigm shifts in medicine necessitate new and innovative approaches in medical education curricula and accreditation systems. Accreditation standards have to accommodate all these changes and traditional concepts should be revised.

Title: The Future of Health Professions Education in The Rapidly Changing Healthcare Ecosystem

Speaker: Hossam Hamdy

Institute: Gulf Medical University, Ajman, UAE.

Abstract: The complexity and the relation of health professions education and healthcare systems is a 'wicked problem'.

It is a challenge to train health professionals who will be practicing in 2030 and beyond. It is difficult to predict societal needs, expectations, and healthcare systems of the future. The interface and the integration of technology in education and practice will impact formal education, lifelong learning, and continuing professional development.

In this presentation, I will try to address these challenges and how we should view the solutions through the lens of a holistic "Systems Thinking" approach.



SYMPOSIA

SYMPOSIUM 1: TECHNOLOGY IN MEDICAL EDUCATION

Title: The AI-Driven Classroom: Adapting to the Changing Landscape of Medical Education

Speaker: Rehan Ahmed Khan

Institute: Islamic International Medical College, Riphah International University, Islamabad

Abstract: AI-driven technologies offer various benefits in the medical classroom. Intelligent tutoring systems can provide personalized learning experiences, adapting to individual student needs and pacing. Virtual patient simulations powered by AI algorithms offer realistic scenarios for students to practice clinical decision-making in a risk-free environment. Machine learning algorithms can analyze large datasets to identify patterns and correlations, assisting students in diagnostic reasoning and treatment planning. Additionally, natural language processing and chatbot applications facilitate interactive learning, enabling students to ask questions, seek clarification, and access information instantly.

Medical education is undergoing a transformative shift due to advancements in artificial intelligence (AI) technology. The integration of AI tools and platforms in the classroom has the potential to revolutionize the way medical students learn, adapt, and excel in an ever-evolving healthcare landscape. This talk explores the impact of AI-driven approaches in medical education and the challenges and opportunities they present.

Title: Connecting the Dots: Building Effective Teacher Networks for Revolutionizing the Way We Teach Future Physicians

Speaker: Masood Jawaid

Institute: Director of Medical Affairs and

Learning Innovations at PharmEvo (Pvt) Ltd.

Abstract: With the increasing prominence of digital media in our daily lives, medical education needs to evolve and adapt to the needs and preferences of the new generation of medical students. Innovative digital medical education presents a promising solution to this challenge, offering a variety of new tools and techniques to improve the learning experience of medical students and better prepare them for the complex demands of modern healthcare.

Drawing on current research and best practices, we will discuss the benefits and challenges of integrating digital media into medical education and explore a range of innovative approaches that can be used to enhance the learning experience of medical students. This talk will focus on the role of effective teacher networks in web-based medical education. To accomplish this, a high level of interest on the part of faculty and the provision of sufficient staff resources at institutional levels are crucial. In addition, new methods should be identified to enable effective teacher networks extending across universities so that knowledge and experience with using web-based media can be shared.

This talk will provide a comprehensive overview of the latest trends and best practices in digital medical education, as well as practical advice on how to implement innovative digital teaching methods in the classroom. Attendees will leave with a deeper understanding of the potential of digital media to revolutionize medical education, and the tools and techniques needed to leverage this potential to prepare the next generation of physicians for the challenges ahead.

Title: Balancing Progress with Responsibility: Ethical and Legal Implications of AI in Medical Education and Research

Speaker: Usman Mahboob

Institute: Khyber Medical University, Peshawar, Pakistan

Abstract:

As artificial intelligence (AI) continues to transform various sectors, its potential impact on medical education and research cannot be overstated. This conference talk will address the ethical and legal implications arising from integrating AI in these domains.

The talk will begin by highlighting AI's advancements and benefits to medical education and research, such as personalized learning, data analysis, and improved diagnostic accuracy. However, it will also shed light on the ethical considerations surrounding the use of AI in these contexts. Key concerns include data privacy and security, algorithm bias, accountability, and the potential dehumanization of patient care.

Moreover, the legal landscape surrounding AI in medical education and research will be explored. Participants will gain insights into existing regulations and frameworks that govern the responsible use of AI in healthcare. The talk will also delve into the challenges of adapting traditional legal frameworks to the rapidly evolving AI landscape, including liability, informed consent, and intellectual property issues.

Furthermore, the talk will emphasize the importance of interdisciplinary collaboration between medical professionals, educators, researchers, ethicists, and legal experts to propose an ethics framework for the future.

Title: The Artificial Intelligence in Medical Education: Where We are and Where We're Headed

Speaker: Ahsan Sethi

Institute: Qatar University, Qatar

Abstract: The integration of artificial intelligence (AI) in medical education has emerged as a transformative force,

revolutionizing the way future healthcare professionals learn and practice medicine. It has made significant strides in various domains and opened up exciting opportunities in medical education. AI-based platforms and applications offer new possibilities for personalized and adaptive learning, enhanced clinical decision-making, and improved patient care. This session will explore the current state of AI implementation in medical education. The current landscape of AI in medical education along with benefits and challenges associated with integrating AI tools into existing educational frameworks. It will also explore the potential impact of AI on lifelong learning, continuing medical education, and professional development for healthcare providers. The session will conclude with a discussion on promising future directions in this rapidly evolving field.

SYMPOSIUM 2: ACCREDITATION AND STANDARDS IN MEDICAL EDUCATION

Title: Global Perspectives on Accreditation and Standards in Medical Education

Speaker: Ricardo Leon Borquez

Institute: Universidad Autónoma de Guadalajara, México

Abstract: In recent years the academic community of medical education has been looking into the benefits of accreditation, and even that there is no conclusive evidence, the empirical benefits are seen by most of the participants in the process of accreditation.

The Global Standards for Quality Improvement in Basic Medical Education have evolved over time. There had been ideas to create a global curriculum for medical schools (an unsuccessful project), which evolved to the creation of the first edition in 2003, the second edition 2013/2015 and the latest principles-based edition in 2020, which is intended to allow users of the standards to make their own

version of core standards appropriate to the local context.

The standards are intended to be a mechanism for quality improvement in medical education in a global context, to be applied by medical schools and other medical education providers, as well as their accrediting agencies, to define institutional, national, and regional standards, and to act as a platform for quality improvement. The standards are not a universal core curriculum and do not define the detail of educational content. They seek to encourage diversity of educational programs, to consider different educational, social, economic, and cultural conditions, different disease patterns and to support social responsibility, so not all WFME standards will be relevant in all regions and settings.

The WFME recommends the use of these standards to institutions responsible for medical education:

As a reference framework for curriculum development, modified or supplemented according to regional, national, and institutional needs and priorities.

- To formulate individual plans of change for quality improvement.
- To establish a system of evaluation, accreditation and/or recognition that ensures minimum quality standards for the programs.
- To safeguard the practice of medicine and for a globally mobile medical workforce.

Processes for accreditation of medical education were considered by an international working group set up by WHO and WFME in 2004 and published jointly by WHO and WFME in 2005. It was not until 2010 when the ECFMG announced its plans for 2023 [now 2024], to only admit international medical graduates from internationally recognized schools that the WFME recognition program was initiated. The impulse for creating the accreditation recognition program was because of the

dangers of unacceptable accreditation.

Title: Accreditation and Standards in Medical Education

Speaker: Ismail Matalaka

Institute: Ras Al Khaimah Medical and Health Sciences University, United Arab Emirates

Abstract:

Accreditation and Standards in Medical Education are vital components in ensuring the quality and consistency of medical training programs. This presentation will explore the history and significance of medical education accreditation, highlighting its role in promoting high standards of education and patient care. The presentation highlights the emergence of accreditation systems, such as the Liaison Committee on Medical Education (LCME) and the World Federation for Medical Education (WFME), and their contributions to establishing and maintaining accreditation standards. It also explains the accreditation process, including the development of standards, the evaluation process, and the determination of accreditation status. The talk emphasizes the importance of accreditation in assuring students, faculty, and the public of program quality, fostering continuous improvement, and facilitating international recognition of medical education qualifications. Furthermore, it explores the evolution of accreditation to address changing needs in healthcare, such as competency-based education, inter-professional education, and technology integration. By highlighting the benefits and challenges associated with accreditation, this presentation underscores its critical role in upholding the integrity and excellence of medical education.

Title: Establishment of a national accreditation system: an experience

Speaker: Azim Mirzazadeh

Institute: Tehran University of Medical Sciences, Iran

Abstract: There are lots of accreditation

system. Although some of them have established nearly 100 years ago, but there is a recent proliferation of accreditation systems around the world. It means that these accreditation systems established in countries which usually don't have any previous experiences in accreditation and this kind of approach to Quality Assurance and Quality Improvement. Exploring the story of establishment of these systems could be helpful to better understanding of the impact of different contexts on implementing a globally accepted concept. In this presentation I will try to provide a brief history of what happened in Iran during the last 25 years which led finally to establishment of an accreditation system for Basic Medical Education Program and received WFME recognition in 2019. It also reviews the challenges we faced during these periods, the solutions we found and implemented and the lessons we learned which could be useful for other countries and accreditation systems.

Title: The route taken by the Azerbaijan Medical University to achieve international acclaim

Speaker: Aygun Babayeva

Institute: Azerbaijan Medical University, Azerbaijan

Abstract: Since its foundation, the aim of the Azerbaijan Medical University (AMU) has been to train highly qualified staff capable of providing high-quality medical care, improving the pharmaceutical industry, as well as preserving and strengthening the health of population. AMU makes every effort to reflect this ambition in its main professional educational programs. To enable its graduates to fulfill their duties for the benefit of humanity, both in their country and in the world community, the task of passing international accreditation was established. Making a survey of the purpose of

international accreditation, which aims to assess and recognize the high quality of activities of a medical educational organization and educational programs offered in accordance with international accreditation standards according to international standards for quality improvement in medical education (WFME/AMSE), it was decided to accredit 3 educational courses "General Medicine", "Dentistry" and "Pharmacy". The fact that the international accreditation procedure serves the general purpose of assessing the quality of the medical organization of education and compliance with international standards even more prompted the AMU to make this decision. Thanks to the successful accreditation, reputation of the university has strengthened, and it gave additional strength to the recruitment of students in profiles of accreditation.

The process of accreditation consists of several stages. Firstly, an application for accreditation is submitted, after which comes the most important stages - preparation of a self-assessment report, which is followed by a visit of external expert commission to the educational organization and in the final a decision is made on the accreditation. Accreditation is necessary process, each stage of it teaches organization to criticize itself, to unite even more with the team and never give up.

SYMPOSIUM 3: INNOVATIONS IN CURRICULUM DESIGN

Title: Incorporating Technology and Digital Health into Dental Education

Speaker: Mustahsen Rahman

Institute: RAK College of Dental Sciences, UAE

Abstract: The progress in technology necessitates dental schools to update their curriculum, teaching methods, and evaluation approaches to meet global standards. The

traditional approach of teacher-centered and passive learning is now being replaced with learner-centered, active learning methods that emphasize clinical competency. The COVID-19 pandemic has presented a chance to revamp our education system and incorporate virtual learning as a crucial element in teaching and evaluating students' progress. However, challenges such as self-discipline, student behavior, hands-on experience, and technology still need to be addressed. The integration of emerging technology into dental curricula has the potential to elevate the standard of dental education in both pre-clinical and clinical environments. By utilizing new technology such as simulation-based dental education and electronic health records, students can improve their skills and effectively apply them to real dental procedures. This incorporation of technology enables a more comprehensive and practical learning experience for aspiring dentists.

The field of dentistry is constantly evolving to offer improved accessibility, comfort, convenience, affordability, efficiency, and effectiveness in delivering oral care to patients. However, there is a scarcity of information regarding the integration and utilization of technology and digital health in dental education. This presentation will try to bridge the gap and understand how better can we integrate artificial intelligence to help teach at dental schools.

TITLE: An Overview of Current Trends and Challenges in undergraduate Dental Education

Speaker: Ulfat Bashir

Institute: Islamic International Dental College, Riphah International University, Islamabad, Pakistan

Abstract: Dental education is rapidly evolving to keep up with the demands of the ever-

changing healthcare landscape. There are numerous emerging trends, innovative approaches, and challenges that must be considered when creating a curriculum that prepares dental students for a successful career in dentistry.

Significance: The significance of this talk lies in its ability to provide a comprehensive overview of the current trends and challenges in dental education. As dental educators, we must be aware of these trends and challenges to create a curriculum that prepares students for the future of dentistry.

The talk will provide valuable insights into emerging trends, such as a shift from traditional to integrated curriculum, the increasing use of technology in teaching and learning practices, the need for interprofessional collaboration, and the importance of developing digital competencies. It will also cover innovative approaches, such as the use of virtual and augmented reality and simulation software. These tools provide students with a more immersive and realistic learning experience, allowing them to practice clinical skills in a safe and controlled environment.

Furthermore, the talk will highlight emerging challenges, such as the need to adapt to changes in dental practice and to address the increasing complexity of dental care. These challenges require dental educators to think creatively and develop new approaches to dental education.

In summary, this talk is significant as it provides a roadmap for dental educators to navigate the rapidly evolving healthcare landscape and create a curriculum that prepares students for a successful career in dentistry. I hope that this talk will be beneficial to all those who are involved in dental education.

Title: Systems thinking for teaching and learning in the clinical environment “The iceberg concept”

Speaker: Hossam Hamdy

Institute: Gulf Medical University, Ajman, UAE.

Abstract: Teaching and learning in the clinical environment are challenging for the students, the clinicians, and the healthcare system. Several systems are involved when learning is taking place at the workplace, hospitals, clinics, etc. Each system has its own culture, goals, and priorities. Systems are complex interdependent and unstable.

The common dissatisfaction of the students, clinical faculty, management, and patient is due to the poor communication between and within the systems 'Inter-systems' and 'Intra-systems'.

This presentation reflects on the rapidly changing healthcare and educational systems and their impact on the student experience of learning at the workplace. Models of holistic approaches in planning, implementation, student assessment, and program evaluation using a systems thinking approach will be discussed.

Title: Innovations in competency based medical education

Speaker: Mahwish Arooj

Institute: University of Lahore, Lahore, Pakistan

Abstract: Competency-based medical education (CBME) has revolutionized the way medical professionals are trained, assessed, and developed. The traditional model of education, which emphasizes the acquisition of knowledge and skills, is no longer sufficient to prepare trainees for the complex and rapidly changing landscape of healthcare. In response, a number of innovations have emerged in CBME, which aim to provide trainees with the skills and competencies they need to succeed

in the 21st century.

One of the key innovations in CBME is the use of Entrustable Professional Activities (EPAs), which are clinical tasks or responsibilities that trainees are expected to perform independently. EPAs allow educators to assess trainees' abilities to apply their knowledge and skills to real-world clinical scenarios. Similarly, Milestones are specific developmental markers that help educators track trainees' progress over time and identify areas for improvement. Another major innovation in CBME is the use of simulation-based training, which provides trainees with hands-on experience in a safe and controlled environment. This allows them to develop their clinical skills and gain experience with complex clinical scenarios before encountering them in real-world settings. Interprofessional education is also becoming increasingly important in CBME, as it allows trainees to collaborate with and learn from other healthcare professionals.

Overall, the significance of innovations in CBME lies in their potential to enhance the quality of medical education and training and improve patient outcomes. By providing a more structured and competency-focused approach to medical education, CBME can help to ensure that medical professionals are equipped with the skills and knowledge they need to provide high quality, patient-centered care in a rapidly changing healthcare landscape.

Title: The Significance of An EPA-Based Curriculum in Medical Education at the Undergraduate Level

Speaker: Rahima Gabulova

Institute: Azerbaijan Medical University, Azerbaijan

Abstract: Entrusted Professional Activities (EPA) are competencies used to characterize the clinical skills needed for the management

of patients. Implementing the EPAs is critical to transforming clinical skills into quantitative and demonstrative clinical practice.

These are units of professional activities, including clinical skills, relevant information, attitudes and professional responsibilities in a clinical environment. EPAs may be supervised, evaluated, tracked, recorded, and certified. They can offer a foundation for developing a reliable, trustworthy training program.

EPAs first introduced to the training of medical professionals in 2005 as part of a broader movement towards competency-based medical education. Since then, the use of the EPAs has been adopted in medical education programs in several countries around the world, mainly for the accreditation of postgraduate medical education. The use of the EPAs continues to grow, and there is increasing interest in standardized EPAs frameworks for various specialities and levels of medical education. Under such circumstances, the widespread introduction of EPAs in undergraduate medical education takes on particular importance. They can serve as a basis for preparing students for further training.

Teaching basic clinical and communication skills and developing critical thinking, clinical thinking, and clinical judgment in a multidisciplinary environment can serve as steps in improving the quality of medical education. These are work tasks that trainees should be able to perform under supervision at a distance by the end of basic training. EPA might be a strong motivation for students to stimulate professional identity formation by encouraging participation in the workplace.

Therefore, the introduction of EPAs into undergraduate medical education and defining the competencies and milestones for each should be considered in curriculum design by medical educators.

SYMPOSIUM 4: ASSESSMENT AND EVALUATION IN MEDICAL EDUCATION

Title: Enhancing Assessment Quality through the Development of the Institute of Assessment: The Riphah International University Experience

Speaker: Rehan Ahmed

Institute: Islamic International Medical College, Riphah International University, Islamabad

Abstract: This presentation delves into the transformative journey undertaken by Riphah University to elevate the quality of assessments through the establishment of the Institute of Assessment. In an era characterized by evolving educational landscapes and an increased focus on assessment methodologies, Riphah University's experience serves as an instructive case study. The Institute of Assessment was conceived as a response to the pressing need for comprehensive assessment enhancements. This presentation outlines the institution's goals, strategies, and methodologies employed to catalyze meaningful changes in the assessment processes. The driving force behind this initiative was the university's commitment to fostering a culture of continuous improvement in education.

Title: Best Practices in Assessment and Evaluation in Medical Education

Speaker: Mona Hamoud AlSheikh

Institute: College of Medicine, Imam Abdulrahman Bin Faisal University, Saudi Arabia.

Abstract: Programmatic assessment (PA) is a new concept in evaluation of competence of medical students. It is a deliberately designed set of assessment activities that when integrated together can give a wholistic high resolution picture about the learner ((Knight

2000; Lew et al. 2002; Schuwirth et al. 2002). It is a shift from assessment of learning to “assessment for learning”. It is a cry for an integrated evaluation of medical student at multiple points along the academic year. It is continuous monitoring and analysis of all attributes of student performance rather than a snapshot. Programmatic assessment is meant to inform the learners and their instructors about their level of learning. Programmatic assessment is meaningful by content and not by the methods of assessment. Results of various tools like MCQ and OSCE may be added to each other to draw meaningful conclusions. Scores are compiled in relation to content and not to tool. So, knowledge will be measured by MCQ, skills by OSCE and values by WPBA in relation to a particular content. Each assessment point acts like a megapixel in an image and adds resolution or vividness to the students' performance image. For example, communication skills can be evaluated by MCQ, OSCE, Short and Long case. Marks are collated from all these assessment tools about that construct.

If we apply the utility equation to the programmatic assessment concept then it proved to be more valid as it is designed to measure different cognitive domains, skills and attitudes of learners, it is more reliable, and has a great educational impact. The expected educational impact would be to infer deep learning and long-term memory strategies.

PA can solve all shortcomings of traditional assessment. Continuous low stakes formative assessment adds to summative assessment and is counted to reach a decision about the learner in PA. Students are in control and are completely informed about their progress and achievement and are partners in planning of their personalized remedial actions.

Title: Assessment for Learning: Moving Beyond Grades and Scores

Speaker: Azhar Rashid

Institute: Islamic International Medical College, Riphah International University, Islamabad, Pakistan

Abstract: It is said, assessment drives learning. The level of performance is assessed against a set of defined standards. Assessment is a vital component of learning. Traditionally, assessment has been of learning (summative) to certify learner for the next level of the profession or job. In the education system including, the discipline of medicine, assessment is no more, only of learning but is for learning as well.

All the learners do not have the same potential for learning. Cognitive, psychological and social reasons are well documented. To improve learning ability and enhance learning for the required performance for “assessment of learning” necessitated “assessment for learning” which is an ongoing process in learning. “Formative assessment” being its main method. The constructive and effective feedback is its soul. Assessment for learning can be, teacher-student or peer assessment.

'Assessment as learning' has been inducted for the individual for learning by self-regulation. All the approaches need training for application and are evolutionary, have advantages concerns and challenges.

One eclipsed dimension in my view is, “assessment for a potential academic failure”. Retrieval of a learner after failure in the first major assessment is very difficult. Failure is a stigma. To salvage a potential academic failure by early detection and rendering support is important. An exploratory qualitative study was conducted at Riphah International University to develop a framework for early detection of an academic failure from the factors revealed in the thematic analysis.

Framework is based on educational journey, observed personality, task performance and reflection.

The purpose of the talk is to highlight that assessment beyond scores is more important and lies before it and propose the concept of “assessment for a potential academic failure”. Learn on the shores before crossing the Oceans of performance galore.

Title: Challenges in Assessing Clinical Reasoning In Healthcare Professionals, Medical Students & Residents.

Speaker: Nabil Seyidov

Institute: Azerbaijan Medical University, Azerbaijan

Abstract: Medicine is an art. Hence practicing medicine requires knowledge-base and specific skills as well as their utilisation for the care of patients which can be described as clinical reasoning or cognition. Assessment of knowledge is often a straightforward process with number of well-proven, validated tools in use, including close-end and open-end questions, written exams, multiple-choice test questions, face-to-face interview, and others. Clinical reasoning is a complex process that involves making judgments based on many variables and clinical data i.e., knowledge. It can be difficult to objectively evaluate the quality of a clinical rationale, as different experts may have different interpretations and evaluation criteria.

However, the assessment of clinical reasoning or cognition is very complex and requires specific tools or even a combination of tools. There are number of challenges in the assessment of clinical reasoning which is inherent into nature of this complex cognitive process.

Clinical reasoning is highly context dependent, and the score should ideally reflect real clinical scenarios. However, creating standardized and representative assessment scenarios that

reflect the complexity of clinical practice can be difficult and may not fully reflect the involved cognitive process of medical professionals.

Clinical reasoning is very much time-dependent and can be divided into two different processes that can be simply described as fast and slow. Medical professionals are trained to act fast in acute or urgent situations where quick decision making is critical. In chronic or slowly evolving complex clinical situations, the decisions are made slowly based on much deeper analysis and analytical skills. As clinical reasoning assessments are usually conducted in a controlled environment it may not accurately reflect real life pressures and demands faced by practicing clinicians or it may not correctly assess the cognitive skills in both – fast and slow – reaction requiring settings.

The various methods used for assessment of knowledgebase are not adequately placed to assess the clinical reasoning skills. Clinical reasoning abilities may vary among medical students and later in clinical practitioners. Some students and even experienced medical doctors may excel in some areas and struggle in others. Assessments should be designed to capture these differences and provide a comprehensive assessment of the person's clinical reasoning skills.

Another challenge is to ensure that assessment results will be ultimately transferrable or valid in testing centre and real workplace. However, one shall be cognisant of the fact that performance in the controlled assessment environment may or may not fully reflect the student's ability to make informed clinical decisions and make diagnoses in real-life patient encounters.

Addressing these challenges requires the development of innovative assessment methods that closely resemble real clinical scenarios, provide timely and meaningful

feedback, and consider the complex nature of clinical reasoning.

Availability of complex simulations, including AI-powered ones as well as standardised clinical case scenarios close to real life situations can be a game changer in assessment of clinical reasoning among students and practicing physicians. Mega-code type live case simulations as well as web or mobile app-based case scenarios with immediate or retrospective feedback mechanisms can assess the clinical reasoning and help to improve one. They can also help to identify the gaps in the clinical reasoning and thus point the student or instructors towards the weaknesses and strengths of each student to work with and to work on.

The presentation will delve into the key challenges in assessment of clinical reasoning, discuss modern approaches and evidence-based tools to utilise for assessment of such a complex cognitive process, and shed a light on future game-changers in this field.

SYMPOSIUM 5: GLOBAL HEALTH AND MEDICAL EDUCATION

Title: Global Health Classroom: From Competencies to Inclusivity

Speaker: Nara Tagiyeva-Milne

Institute: Azerbaijan Medical University, Azerbaijan

Abstract: Reducing the burden of sickness and mortality among the poor and disadvantaged is the overarching mission of the Liverpool School of Tropical Medicine (LSTM), the first institution in the world founded in 1898 to research and teach tropical medicine. Since then, LSTM has been expanding and growing strengths in wider domains of medicine and public health to fulfil the vision of “Healthy lives across the world”.

We present an overview of the LSTM distinctive education portfolio, focusing on our

experiences in delivering two competency-based flagship programmes: campus-based Master of Public Health and distance-learning MSc Global Health. We further discuss a Global Health Classroom model for a collaborative learning founded on the global diversity of LSTM students and lecturers, international partnerships and modern technology.

In the era of burgeoning impacts of globalisation on health and healthcare and our appreciation of global determinants of health, global health education has increasingly gained international recognition.

We will consider the beneficiaries and transformative impact of the LSTM model of education at different levels: individual student and colleague competency and career development, local health systems and healthcare services management, a wider societal and international visibility and prominence of the graduates through contribution to research, policies, practice, and partnerships, and ultimately, improvement in health and wellbeing in disadvantaged populations around the world.

We will also reflect on the ever-evolving nature of the Global Health Classroom, its strengths and limitations and future in medical education.

Title: Strengthening Healthcare Systems Using Human Factors Training and Continuous Quality Care Improvement

Speaker: Paul Barach

Institute: Thomas Jefferson University, USA

Abstract: We know that 1 in 10 patients are harmed in hospital from poor quality care, leading to between 5.7 and 8.4 million deaths. Fourteen out of every hundred patients are affected by healthcare associated infections. At a hospital level, 15% of hospital costs are due to patient harm caused by adverse events. Healthcare is finally being looked at as a system that needs all the moving parts to work in

harmony. Our patients are more frail, older, have increased and multiple comorbidities. The role of human factors (HF) and continuous quality improvement (CQI) in strengthening healthcare systems tends to be overlooked compared with specific skills or knowledge training. Medical educators have been talking about patient safety, CQI and HF for over 20 years with the evidence clearly reflected back at us. Quality improvement approaches using process maps, fishbone diagrams, failure mode effects and analyses, and risk matrices can be effectively implemented to assess training resources, choices, and aims. The question is whether the medical education community is ready to accept HF/CQI training as an essential and mandatory part of the curriculum, and if so, how we should effectively assess our learners. Hospital and medical education leaders need to find more effective, ethical, and transparent ways to reduce the exposure risks to patients and to balance these risks and benefits to patient care and education. In making medical learner assignments, leaders should consider the level of training and the risks and benefits of the educational or clinical activity being assessed. The talk will review a 4-part innovative framework which provides a robust and ethical foundation for supporting learning and leadership opportunities and facilitates intellectual, professional, and personal growth for learners at all matriculation levels. The four-part framework helps to justify risky activities selected to integrate learning and service in ways that affirm the deep commitment of learners to their chosen profession and the ethical obligations of academic medical leaders. Thinking about medical education from a dynamic risk-benefit perspective supports a novel decision-making approach that can offset activities that carry a higher risk, with an understanding that these fully disclosed risks are offset by more

substantial anticipated benefits.

Title: Bringing Authentic Learning Opportunities to Life Through Immersive Learning Technology: Opportunities and Challenges

Speaker: Dan Robinson

Institute: Liverpool School of Tropical Medicine, UK

Abstract: The landscape of medical education is rapidly evolving, and with the advent of new technologies educators are looking for innovative ways to engage learners in meaningful ways to deliver learning opportunities which are engaging and authentic to their future professional practice. Immersive learning technology is emerging as a valuable tool which can place students in real-life settings through the use of specialist Audio Visual (AV) hardware and real-world 360 degree video footage. By using real-world footage, students can take part in interactive learning scenarios enabling them to experience real-life settings and gain a deeper understanding of how their learning can be applied in practice. This helps to bridge the gap between theory and practice, and prepares students for the challenges of working in a real-world settings which may not have been previously possible for ethical, geographical or safety reasons.

However, while there are many advantages of Immersive Learning, there are also challenges that must be overcome to ensure it is integrated effectively into curriculum and the technology doesn't become a white elephant. This session will look at the capabilities of this technology, specifically the Immersive Learning Suite (ILS) at the Liverpool School of Tropical Medicine, the opportunities it provides, and the challenges of implementation and ongoing support. We will also consider approaches to successfully embedding Immersive Learning Experiences

(ILE's) into the curriculum.

Title: The Role of Faculty Development in Medical Education and Its Impact on Global Health

Speaker: Samir Javadli

Institute: Azerbaijan Medical University, Azerbaijan

Abstract: Medical education plays a vital role in shaping competent and compassionate healthcare professionals, whose knowledge and skills directly impact global health outcomes. This presentation abstract aims to explore the essential role of faculty development in medical education and its profound impact on global health. The presentation will delve into the following key points:

- Introduction to Faculty Development:
- Definition and objectives of faculty development in medical education. The significance of faculty development in cultivating effective teaching methodologies, promoting active learning, and enhancing clinical skills.
- Enhancing Teaching Effectiveness:
- Strategies for improving pedagogical approaches, such as adopting learner-centered teaching methods and incorporating innovative technologies. Promoting effective communication skills, feedback mechanisms, and mentorship programs to enhance faculty-student interactions.
- Fostering Research and Scholarship:
- Encouraging faculty members to engage in research and scholarly activities to advance medical knowledge and evidence-based practice. Promoting interdisciplinary collaborations and dissemination of research findings to contribute to global health initiatives.
- Advancing Clinical Skills and Professionalism:

- Training faculty members in the latest clinical practices and technologies to ensure up-to-date medical knowledge.
- Promoting Faculty Well-being and Resilience:
- Recognizing the importance of faculty well-being and resilience in sustaining effective medical education. Implementing support programs, work-life balance initiatives, and stress management strategies to enhance faculty satisfaction and retention.
- Impact on Global Health:
- Demonstrating the direct correlation between faculty development and improved healthcare outcomes at the local, national, and global levels. Highlighting successful case studies and initiatives where faculty development has positively influenced global health initiatives.

Conclusion: This presentation abstract emphasizes the critical role of faculty development in medical education and its profound impact on global health. By investing in continuous professional growth, institutions can ensure high-quality medical education, foster innovation and research, and cultivate competent healthcare professionals. The abstract provides insights into effective strategies and showcases the transformative potential of faculty development in shaping the future of healthcare education and practice.

SYMPOSIUM 6: WELLNESS AND RESILIENCE IN MEDICAL EDUCATION

Title: Main Challenges in Medical Education from International Student's Perspectives in Georgia

Speaker: Jilda Cheishvili

Institute: Sulkhani-Saba Orbeliani University, Tbilisi, Georgia

Abstract: Background: High increased

population over the world is correlates increasing mortality and morbidity which requests demand of the doctors in all specialties. Georgia is the Country which attracts international MD students, and rapid growth of them is directly proportional to the quality of education.

Summary of Work: The research was conducted using a mixed method, using both quantitative and qualitative methodology. According to the results of the research: existing students like teaching in a clinical environment, practicing doctors as lecturers, would recommend studying here, although most of them believe that it is necessary to devote more time to problem-based Learning in the studying process and to put more emphasis on the use of real cases in the process; Despite the fact that students like the quality of teaching in Georgia, graduates emphasize the gap between theoretical and practical subjects. They also believe that it would be interesting to develop a more flexible training program, considering the language barrier.

Discussion and Conclusion: The results demonstrate a clear need improvement of medical education in Georgia.

Take Home Messages: Medical programs should cover the nine objectives of the Third Goals of SDG (3) and the priorities set by the World Health Organization (WHO), which are focused on promoting a global population health strategy. Increasing quality of medical education is directly effects on the quality of healthcare.

Title: Understanding the Mental Health Needs of Medical Students

Speaker: Fadil Citaku

Institute: Academy of Leadership Sciences, Switzerland

Abstract: In recent decades there is a growing attention to psychological distress among

medical students. Stress among both medical students and residents has been investigated in several studies. At the start of medical school, medical students have mental health similar to nonmedical peers, but frequent studies suggest that students' mental health worsens during the medical training.

Several stressors threaten medical students' mental health. Common stressors include adjustment to the medical school environment, educational debt, heavy workload, sleep deprivation, difficult patients, poor learning environments, financial concerns, information overload and career planning. These stressors can lead to catastrophic consequences such as anxiety, depression, impaired academic performance, impaired competency, medical errors and attrition from medical schools.

In a large study in UK using the 12-item General Health Questionnaire (GHQ-12), 30.6% of first-year medical students, 30.6% of fourth year and 21.9% of fifth year medical students scored above the threshold indicating that medical students were suffering from some sorts of psychological distress. Using the same questionnaire, a study from Turkey indicated that 47.9% of the second-year medical students experienced emotional disorders, well above the percentage of students studying economics (29.2%) and physical education (29.2%). A study from Malaysia also reported that 41.9% of medical students experienced emotional disturbances.

In this symposium we will provide neuroscience-based tools to understand the mental health of medical students and to support them towards remaining mental health and stable during their study.

Title : Strategies for Humanizing Technology in Health Profession Education

Speaker: Muhamad Saiful Bahri Yusoff

Institute: School of Medical Sciences, Universiti Sains Malaysia, Kota Bharu, Kelantan, Malaysia.

Abstract: The utilization of technology in

health profession education is advancing rapidly and is becoming increasingly critical. To provide students with a personalized, meaningful, and supportive learning experience, it is imperative to prioritize the humanization of its implementation. There are several strategies that can be employed to achieve this goal, such as humanizing learning institutions, leveraging the uberization of higher education, revitalizing education ecosystems, and preparing healthcare learners for a changing world. In addition, it is crucial to comprehend the students' needs, use technology as a supplementary tool, cultivate a sense of community, provide training and support, and take into account accessibility to ensure equitable and effective implementation of these strategies. By working together collaboratively to humanize technology in health profession education, we can equip students with the education they require to excel in their careers.

Title: Building Resilience Through Mindfulness and Self-Care

Speaker: Muhammad Nadim Akbar Khan

Institute: Islamic International Medical College, Riphah International University, Islamabad, Pakistan

Abstract: This abstract introduces a 20-minute talk on "Building Resilience Through Mindfulness and Self-Care" to be presented at

the symposium on "Wellness and Resilience in Medical Education." The talk will explore the vital role of mindfulness and self-care in fostering resilience among medical students and healthcare professionals.

The presentation will begin by defining resilience as the ability to bounce back from adversity and adapt to stressful situations. It will emphasize the relevance of resilience in medical education.

The talk will then delve into the concept of mindfulness and its positive impact on resilience. Mindfulness, the practice of being fully present and non-judgmentally aware of one's thoughts and emotions, will be explored as a powerful tool for reducing stress, enhancing self-awareness, and improving overall well-being.

Additionally, the talk will emphasize the importance of self-care in cultivating resilience. Participants will learn about various self-care practices, including physical, emotional, and mental aspects, that contribute to maintaining optimal well-being.

By the end of the talk, attendees will gain a deeper understanding of the interplay between mindfulness, self-care, and resilience. They will be empowered with actionable steps to integrate these practices into their daily lives, promoting their well-being, preventing burnout, and enhancing their ability to provide quality care to patients.



WHAT THE EXPERT SAYS?

WES 1

ANIS AHMAD S.I.

Title: Transforming Health Professions Education: Trends, Challenges, and Solutions

Institute: Riphah International University, Islamabad, Pakistan

Abstract: Education has always been a demanding area, particularly in this age of rapid developments in knowledge creation. By the time a traditional textbook arrives in a university library lots of water is flown under the bridge. Particularly in the age of A.I. and innovations like Chat GPT, serious ethical challenges have surfaced with reference to reliability and authenticity of Chat GPT and similar innovations. It's used by students and researchers.

I believe if we want to encourage honest innovative and creative research and professional programs we must go back to basics. The most important element not given its due place, to inculcation of ethical consciousness as an integral part of the professional education and training programs. It is not enough to talk about conventional view of confidentiality and welfare and well-being of a patient. We must focus more on development of overall ethical outlook of students and researchers. In a digitalised and dehumanised social order educationist shall have to focus on certain global ethical values to counter, at a positive level, the invasion of materialism, individualism, and ethical relativism.

The value of the justice and fairness, honesty, sympathy, and care, can play a central role in building ethical behaviour of medical professionals and practitioners. The presentation shall focus on inculcation of global ethical values in curriculum, professional trainings, and workshops.

YAWAR HAYAT KHAN

TITLE: The Role of Transformational Leadership Addressing Organizational Challenges in the 21st Century

Institute: Riphah International University, Islamabad, Pakistan

Abstract: Theme & Issue Addressed: Considering the dynamics of organizations in the 21st century, it has been clear that organizations, especially in the higher education sector, are faced with numerous challenges. The issues of financial sustainability and increased competition in the academic world have been overwhelming in recent days. In response to these challenges, higher education organizations are obligated to adopt the most efficient leadership styles. In this case, the concept of "Transformational Leadership" has been highlighted as the most suitable strategy/style for addressing challenges in the academic world.

Significance: The significance/rationale for today's session is to ensure that the participants who are attending it should be well equipped and trained to represent their organizations with the most effective and appropriate tools and techniques required to tackle all sort of challenges in the modern-day academic environment. We hope and pray that this activity provides you with the right skills and mind set to effectively lead and represent your organization in the direction of growth and development.

ALINA ZHUMAGULOVA

Title: Quality Assurance in Medical Education in Central Asia: Challenges and Trends

Institute: Independent Agency for Accreditation and Rating (IAAR), Kazakhstan

Abstract: World trends in medical education are widely used in the countries of Central Asia. The presentation reflects the main problems of the Central Asian region: the digital divide in the regions, the functional illiteracy of the

population, the lack of investment in science and education, as well as the low coverage of young people in the regions with vocational education, etc. Feedback from the universities and colleges of Central Asia is important, as a wide range of information provides an opportunity for analysis. This gives a deep understanding of social problems and determines ways to solve them. For example, social injustice was revealed in the education of girls from villages, where they are trying to marry them off early, as well as inequality in education opportunities.

During monitoring, the problem of non-compliance of medical education with the requirements of the labor market was found since the changing conditions of the labor market and the demands of the healthcare sector are not considered. We note the lack of a deep analysis of the development of education and the lack of monitoring of the assessment of the quality of education.

IAAR has authority in the region, a large base of experts, international partners, as well as practical experience in promoting European quality standards ESG and WFME. Given its geographical location, common language, culture, and traditions, IAAR can become a bridge between Europe and Central Asia. This will improve the quality of education in the Central Asian region, reduce social tension, injustice, and inequality in the opportunity to receive education.

Carrying out accreditation in educational organizations of Central Asia, the need to expand academic freedom is identified, which will help ensure the quality of education and increase demand in the labor market and in society.

AZIM MIRZAZADEH

Title: Scholarship of Teaching & Learning: From Theory to Practice

Institute: Tehran University of Medical

Sciences, Iran

Abstract:

Traditionally, Scholarship of Teaching & Learning (SoTL) was limited to the production of new knowledge as we call it as research. Although research is a vital part of scholarship but confining the broad spectrum of scholarship to just research had major negative impacts on the health of academic institutions and led to imbalance between their different missions including teaching, research, and service. In 1990s, Ernest Boyer conducted a survey among more than 5000 faculty members all around the United States and based on its results proposed an expanded definition of scholarship which includes scholarships of discovery, integration, application, and teaching. Scholarship of Teaching & Learning is one of the most important types of Scholarship which has direct impact on educational innovation and development. A few years later, Charles Glassick provided a model for assessment of scholarship. Boyer's new definition and Glassick's tools for assessment of Scholarship led to a major change in the approach of Higher Education institutions to scholarship and faculty evaluation and promotion. During the last three decades, several institutions have used this definition and implemented it in their ecosystem, especially in the field of Health Professions Education. In this presentation, I will try to provide an overview of basic concepts and development about SoTL and what we have learned in Iran about its implementation at both national and institutional levels. I also provide a framework on how to promote the scholarship of Teaching & learning and show examples on how we implemented it in Iran.

WES 2

HOSSAM HAMDY

Title: A Holistic Approach for Communications in Health Professions Education: A Curriculum Not a Course

Institute: Gulf Medical University, Ajman, UAE.

Abstract: All over the world and for many years, health professions education programs have been using different approaches in teaching communication skills. Empirical evidence of its effectiveness is small and confidence in the results is low (Gilligan C. et. al. Cochrane Systematic Reviews 2021) An important contributing factor to the inadequate outcome is that communication is considered a skill, (Sarangi S. Communication and Medicine 2022) a form of behavior which we teach it like other procedural skills following a linear reductionist approach. It is commonly taught as a course in our early phase of the curriculum.

It has been commonly labeled as a 'soft skill' in contrast to the 'hard skills' i.e., Knowledge and clinical expertise. In fact, it should be considered 'Hard skill' as it is core competency of the healthcare provider and for the successful outcome of the patient journey in the healthcare system.

In this presentation, I argue that Medicine is a social science. It is about people and human interaction embedded in the rapidly changing healthcare system. Ineffective communication training in healthcare is a multifaceted, multidimensional, complex 'Wicked problem'. It should be viewed through the lens of a systems thinking, holistic approach, recognizing the communication system components, and the interrelatedness of these components (religion, culture, social, economic, providers, and students' perspectives) and how they work in healthcare practice and health professions education.

ELMAR RZAYEV

Title: Medical Education Based on Simulations Norms and Reforms in Medical Education: The Road to Ownership

Institute: Nakhchivan State University, Azerbaijan

Abstract: It is possible to apply the daily theoretical knowledge gained in medical education to practice more easily with simulation-based medical education. Simulation-based medical education is an exciting and fun process that both medical simulators and students can perform live on each other. Especially organizing first aid simulations with different risks is the most appropriate way for students to apply the knowledge they have acquired in theory to practice. First medical aid based on simulation scenes: help to a person trapped in an avalanche, foreign body falling into the upper respiratory tract, clinical death, burns, sprains, fractures, various bleedings, and similar situations that require emergency action, as well as the use of various simulators in medical education is one of the important steps towards the future. The absorption of knowledge by students, especially the installation of non-auditory classes through simulations, leads to easier understanding of theoretical knowledge. Our numerous experiments lead to the conclusion that the application of simulations in classes outside the classroom is an effective educational tool for mastering knowledge. This also makes it easier to remember the newly learned theoretical knowledge when it is applied in harmony with the previously learned knowledge.

At the same time, in education based on simulation, there are opportunities to discuss information, evaluate the obtained results, and express personal opinions of students. This also leads to increased interest in learning.

ZACKIYA MUSTAFAYEVA

Title: Leadership Education for Medical Professionals

Institute: Food Safety Agency of Azerbaijan Republic, Azerbaijan

Abstract: For many decades in many countries national medical education systems for nurses, doctors and health managers of medical facilities were focused mainly on raising the level of professional theoretical knowledge and practical skills. But health care practitioners take some leadership responsibilities throughout their careers, but they are not trained to lead. "Leadership" is a basic medical competency. So, leadership skills and management methods should be integrated within the framework of medical education. Undergraduate and residency programs and programs of continuous medical education should modify curricula to include leadership and management skills' development at all levels of training. Such kind of programs allow to gain knowledge in the field of modern management for medical facilities, professional competencies in the field of development of regulatory legal healthcare acts and resource management in organizations of the healthcare system.

WES 3

MUHAMAD SAIFUL BAHRI YUSOFF

Title: Strategies to Promote Wellbeing in Faculties & Learners

Institute: School of Medical Sciences, Universiti Sains Malaysia, Kota Bharu, Kelantan, Malaysia

Abstract: This presentation highlights the strategies to promote wellbeing in faculties and learners in health professions education, as it leads to better learning outcomes, reduced burnout, and improved patient care. Effective strategies for promoting wellbeing include creating a culture of wellness by incorporating wellbeing into the curriculum and organizational structure, promoting self-

care practices among learners and faculty, providing mentorship opportunities, and addressing the stigma surrounding mental health. Developing policies that prioritize wellbeing, providing opportunities for physical activity and social support, and offering mental health resources such as counselling services are some of the ways to create a culture of wellness. Encouraging learners to prioritize sleep, exercise, and healthy eating habits, modelling self-care behaviors by faculty, and providing mentorship and career development opportunities are other ways to promote wellbeing. Addressing the stigma surrounding mental health by educating learners and faculty and creating a safe environment for discussing mental health concerns can also help reduce the stigma and encourage help-seeking behaviors. By implementing these strategies, health professions education can create a culture of wellbeing that benefits learners and faculties as well as patients.

RAHILA YASMEEN

Title: Quality Parameters in Faculty Development Programs : A Way Forward

Institute: Riphah International University, Islamabad, Pakistan

Abstract: This talk will highlight the importance of faculty development in health professions according to need and paradigm shift of education system and technology. Through this talk participants will understand various faculty development approaches with emphasis on workplace-based faculty development and quality parameters to aspire excellence in faculty development programs. It will also introduce the audience to the journey of faculty development at Riphah International University.

MONA HAMOUD ALSHEIKH

Title: Let's Learn Together and From Each Other

Institute: College of Medicine, Imam

Abdulrahman Bin Faisal University, Saudi Arabia.

Abstract: What problem is addressed? Healthcare systems are fragmented, and healthcare providers are not working together to provide the required integrated services. This leads to lack of coordination and low-quality higher education and healthcare.

What was tried? A set of core competencies that are essential to teach and assess in health profession, guided by *The Twelve Roles of the Teacher* by Harden and the *Adult Learning Principles* by Knowles, was designed as a 3 modules of 3 days each course. Interprofessional faculty development program (IPFD), in which healthcare workers are trained in a safe environment where they communicate effectively and learn from each other through structured hands-on activities, was applied. Advantages of IPFD over health profession segregated FDP will be discussed from experience with details of a success story. Examples of shared activities where nurses can teach physicians and clinical nutritionists and clinical pharmacists can enrich the training will also be discussed. Levels of collaboration and healthcare issues that need collaborative practice will be discussed. Multiple strategies which can be used to prepare future healthcare workers to be effective team member will be presented. The Kirkpatrick model was used to evaluate the impact of IPFD on faculty satisfaction, student performance in clinical rotations and licensure exams, student perception of the quality of their courses, and on written and practical examinations quality metrics.

What lessons were learnt? The talk concludes with the author experience about collaborative interprofessional faculty development program describing a success story and its positive impact on students, faculty members, and the institution which highlights the roadmap to implement these

practices in health sciences to improve learning outcomes.

Conclusion: Applying interprofessional education principles to faculty development was associated with a positive impact on quality of teaching, health care practice, and learning outcomes. The author highly recommends education.

WES 4

Fadil Çitaku:

Title: The Impact of Neuroleadership and Emotional Intelligence Towards Reaching a High Quality in Healthcare

Institute: Academy of Leadership Sciences, Switzerland

Abstract: According to experts of leadership science an important threat facing the world today is the lack of effective leadership of our human institutions. Health organizations 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 programs administrators and expert overseers of legal, contractual and policy mandates and initiatives. Yet, they encounter major challenges such as commercialization 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 because of inadequate and inefficient leadership. This talk will outline the evidence-based Leadership and Emotional Intelligence Competencies, which are required to reach the high Quality in Medical Education and Healthcare. In addition, a concrete example of establishment of one Centre of Excellence in Leadership Innovation and Quality in Medical Education and Healthcare, called CLIQ will be explored.

LAWRENCE SHERMAN

Title: CPD (CME) and IPCE – It's a Whole New Ballgame

Institute: Strategy and Performance, AXDEV Global, UK

Abstract: When some people think of CPD, they picture large lecture halls filled with colleagues, peers, and many others. Others, certainly since the pandemic, think of sitting in front of a computer screen watching, listening, and sometimes typing, all from the comfort (?) of home or work. Current CME options should offer new, exciting, engaging, and dare I say, enjoyable experiences for busy clinicians that need to continue with their lifelong learning. So often we hear about the pedagogy involved in CME; I would argue that this is often the wrong word to use to describe the learning science behind the development of appropriate CPD. Traditionally, pedagogy refers to instructor-led education, in which the learners are taught much the same way that children (hence the “Ped” in pedagogy). But we know that adult learners, those who are in professional practice, are driven to learn based on problems or questions that arise in the workplace. They seek out education, and thus are more in control of the educational choices and format. This requires educators to factor in adult learning principles and follow the science of andragogy. It is imperative to use the appropriate techniques and formats to

support adult learners.

More recently we are looking more at the science of heutagogy, where the learners are completely in control of the educational environment. So, we see increasing independence in the lifelong learning continuum from pedagogy andragogy heutagogy.

This session will feature an interactive conversation between the presenter and the participants in which best practices for developing and measuring the impact of CPD and IPCE in face-to-face and digital formats. Elements of the learning science behind specific examples will be provided as well, leading to a series of action items for participants to leave with to rethink CPD and IPCE in their own contexts.

MAHWISH AROOJ

Title: Beyond Traditional Academics: The Need for a Comprehensive Student Development Program for Undergraduate Medical Students

Institute: University of Lahore, Lahore, Pakistan

Abstract: Due to the direct impact on human life, medical and dental education traditionally prioritizes academic training over students' personal and professional development. As a result, many medical students, after graduation, when facing the real world of medicine, feel underprepared to handle highly stressful situations, communicate effectively, adapt to the environment, and have enough resilience to carry on, thus not only affecting themselves but also compromising patient care. Informal and hidden curricula within the medical & dental colleges may inculcate certain life skills in some students; however, the challenge is ensuring that all graduating doctors and dentists have the core life skills to practice medicine effectively.

The importance of developing a holistic and structured program to supplement academic

training is becoming increasingly evident in medical education. A formal, organized Student Development Program (SDP) that focuses on seven-star doctors' outcomes is necessary for the training institutions to graduate 21st-century doctors. The talk highlights the formal program that can be adjusted within the academic year without burdening the faculty and students in shaping students' personal and professional character. It will also discuss how the program's implementation will enhance medical education and clinical training, ultimately improving patient care and community health outcomes.

ZAHRA VAZIROVA

Title: Improving Health Care Quality Through Simulation Education

Institute: National Center for Oncology, Azerbaijan

Abstract: Improving the quality of education is the main task facing higher education institutions. It induces the continuous improvement of the educational process through the development and implementation of innovative forms and methods of teaching, strengthening the material, technical, and information base, ensuring effective integration of the educational process and practical healthcare.

The problem of teaching independent clinical thinking to medical students is a current issue in the education system. It is also important to remember that simulation education is

introducing not only for students — it can also be helpful to refresh and improve the skills of practicing medical professionals.

Nowadays, many different methods in the training system contribute to deepening and increasing motivation to acquire new knowledge and skills. The implementation of situational tasks in the educational process, illustrating the most typical diseases, is widely used in the continuous educational process.

However, these methods do not allow fully ensure the establishment of clinical thinking and teach communication skills to patients. These tasks are met by the “standardized patient” methodology. In the process of training according to the “standardized patient” method, it is mandatory to review and discuss the student's tactical behavior in various clinical situations, his ability to conduct differential diagnostics, and make a preliminary diagnosis, which increases the body of knowledge and on the other hand forms the skills of medical teamwork.

Training with the introduction of simulation techniques has several benefits including reducing medical errors, improving patient safety, communication skills, and teamwork. Effective interprofessional practice is essential to providing high-quality and safe medical care.

In conclusion, simulation training is not only a technology. Simulation has a critical role in creating effective changes in medical education and the healthcare system.



COURSES

COURSE-01

Title: Basic Skills in Health Professions Education

Facilitator: Raheela Yasmeen, Mona Al Sheikh, Shabana Ali, Tahira Sadiq

Institute: Riphah International University, Islamabad Pakistan

Abstract: Due to the advancement & development of innovative educational strategies with implementation of E. Learning environment, technology zenith and advance scientific research in medical & allied health, the health professionals require to be acquainted with all these innovations and demonstrate essential skills & competencies as a medical teacher. This means that training of health professionals requires high standards of education at par with the realities of the practical world. Along with the expansion of health professionals as a need, a reform in health professions education is taking place world over e.g., Curriculum integration, implementation of PBL/CBL, use of simulator in teaching, virtual patients, OSCE/OSPE as an assessment tools etc. Therefore, this course is designed to keep in mind the basic requirements for a medical teacher in Health Profession Education to demonstrate the competencies of an effective medical teacher.

Course Goal: The course endeavors to train faculty of health profession education to produce competent health profession's teacher.

Outcomes of Course: By the end of the course the students will be able to:

- Adept in basic knowledge and its application in the core areas of medical education i.e., educational environment & students, teaching and learning, curriculum development including educational strategies & curriculum themes, Students assessment and Program

evaluation.

- Critically examine the implementation of principles of adult learning while teaching.
- Use knowledge and skills required for designing & developing an integrated curriculum/Module/course at an undergraduate level.
- Apply the fundamental principles and concepts in students' assessment while designing an assessment plan and assessment tools.
- Outline a plan with tools for evaluating a teaching program.
- Demonstrate effective communication skills (active participation, professionalism, group dynamics, team building, peer learning etc.) while working in the group/team tasks.

COURSE-02

Title: Educational Leadership

Facilitator: Yawar Hayat Khan, Fadi Citaku

Institute: Academy of Leadership Sciences 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 because 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-03

Title: Explainable Artificial Intelligence in Medical Education

Facilitator: Rehan Ahmed Khan, Masood Jawaid, Madiha Sajjad

Institute: Riphah International University, Islamabad Pakistan

Abstract: Artificial Intelligence (AI) is reshaping medical education, assessment, and research. AI's impact on medical education is evident through personalized learning experiences that adapt to individual student needs, enhancing knowledge retention. The

integration of AI into assessment methods enables automated grading and real-time feedback. In the field of medical research, AI expedites processes by analyzing extensive datasets. Exploring AI's transformative role in medical education, assessment, and research, this workshop inspires the medical community to embrace innovation while upholding the values and responsibilities inherent in the practice of medicine.

COURSE-04

Title: Basics of Research in Health Professions Education

Facilitator: Muhamad Saiful Bahri Yusoff, Usman Mahboob, Ahsan Sethi

Institute: School of Medical Sciences, Universiti Sains Malaysia

Abstract: Research is one of the areas of medical education that is continuously evolving with the addition of new philosophical approaches and ways of thinking to solve the problems in medical education or to explore new horizons. It is also one of the most discussed but neglected areas when it comes to formal training in research. The aim of this workshop is to discuss the dynamics of quantitative and qualitative research in Health Professions Education with the study participants. The participants would take away a different insight into research in health professions education after attending this course. The target participants should be working on a research proposal that can be discussed during the course, so they can also be guided on how to further improve their proposals.



PRE CONFERENCE WORKSHOP

PCW 01: Assessment of Professionalism in Health Professions Education

Facilitator: Usman Mahboob

Institute: Khyber Medical University, Peshawar, Pakistan.

Abstract:

Objective: The workshop participants will discuss and develop a framework to assess professionalism in health professions education.

Description: Assessment of professionalism is not straightforward because 'professionalism' as a learning outcome focuses on subjective attributes related to humanism, accountability, altruism, and excellence.

Due to their subjective nature, objective assessment methods are not necessarily the most appropriate tools for assessing professionalism. Hence, a multi-dimensional, multi-paradigmatic approach is required to evaluate professionalism using three primary levels: individual, interpersonal, and societal-institutional.

PCW 02: Estimating Student Learning Time for a Better Learning Experience in Health Professions Education

Facilitator: Muhamad Saiful Bahri

Institute: School of Medical Sciences, University Sains Malaysia

Abstract:

Objectives:

- Discuss the concept of student learning time.
- Explore tools for estimating student learning time.
- Estimate student learning time.

Description: To provide the best practice in the estimation of student learning time for a better learning experience to healthcare learners.

PCW 03: Stepwise Approach to Construct Assessment Blueprints for Undergraduate Examinations

Facilitator: Abida Shaheen, Fahad Azam, Saira Akhlaq

Institute: Shifa Tameer-e-Millat University, Islamabad, Pakistan

Abstract:

Objective: At the end of the session participants will be able to:

- Describe the concept of blueprinting in medical education.
- Identify different methods of assessment blueprint.
- Develop assessment blueprint for undergraduate medical curriculum.

Description: Modern-day medical education requires medical educationalists to be expert at designing assessments that ensure the alignment of all aspects of the curriculum to be covered by the appropriate assessment tools. Effective assessment plans require alignment between learning outcomes, instructional activities and assessment and should be planned while designing learning strategies.

PCW 04: Skills for Aspiring Change Agents and Leaders in Health Professions Education

Facilitator: Ahsan Sethi

Institute: Qatar University, Qatar

Abstract:

Objectives: The participants will be able to:

- Reflect on their leadership style and skills.
- Understand tools/techniques to facilitate change.
- Reflect on change management theory.
- Develop strategic plan to manage and implement change.
- Develop skills for change agents.

Description: The workshop is packed with an interactive presentation, exercises and relevant tips and techniques to achieve results as leaders or change agents. Group discussions and activities will also provide an opportunity

for the participants to share their unique perspective and arrive at the right mindset for scaling their change management plans to the next level. The participants will:

- learn better people-management skills.
- become more effective in their leadership roles.
- improve interpersonal relationships.
- increase their productivity get better result.

PCW 05: Workplace Based Assessment (WPBA) - Mini- CEX and DOPS : Nearly The Peak of Miller's Pyramid!

Facilitator: Saadia Sultana, Muhammad Nadim Akbar Khan

Institute: IIMC-T, Riphah International University, Islamabad, Pakistan.

Abstract:

Objectives: Upon conclusion of this workshop, participants should be able to:

- Describe the process of Mini-CEX & DOPS
- Summarize the important components of MINI CEX & DOPS
- Describe different situations & uses of MINI CEX & DOPS
- Able to successfully conduct a min CEX & DOPS

Description: Patient-trainee /doctor interaction that is observed through WPBA and feedback is provided by an assessor, helps the doctors to improve their clinical judgement, decision making and professional and procedural skills. It also evaluates the trainee's clinical skills, judgement, professionalism, and competence etc. Encourages reflective practices. Help the trainee build evidence of their progress etc.

PCW 06: Holistic approach to HPE (Health Professional Education)

Facilitator: Omar Alhussaini

Institute: Free Lancer, Oman

Abstract:

Objectives: The participants will look at the health system/s and stake holders and their needs, quality assurance and guidelines, policies, using work-based assessment (with emphasis on IPE) including 360 evaluation, CBD, mini cex. As well as looking at OSCE's, OSTE's, OSPE's and their role in the holistic approach to medical education.

Description:

Rationale: This workshop includes:

- Interaction between different HPE's
- multi-professional and interprofessional education
- medical education vs HPE
- emphasis on each one's role and job description
- teamwork
- financing and promoting HPE workshops/certificate etc.
- continuous communication

PCW 07: SWOT- Analysis of Medical Institution

Facilitator: Aygun Babayeva

Institute: Azerbaijan Medical University, Azerbaijan.

Abstract:

Objectives:

- To identify an organization's internal strengths and weaknesses, important opportunities for improvement, and threats to performance by using SWOT-analysis.
- To focus on significant points to be aware of to avoid making typical blunders during SWOT-analysis.
- To identify the decision-making principles and action priorities; alternative courses of action; desired outcomes and resources; and approaches for accomplishing goals.
- To teaching an environmental scan for in-depth analysis.
- To emphasize the significance of SWOT

analysis in development or updating the university's strategic plan.

Description: SWOT analysis is a strategic planning tool that helps organizations describe their current positions. SWOT analysis offers the advantage of enabling for a comprehensive evaluation of the institution, competitors, and industry. This tool assists in improving abilities in identifying the institution's specific resources, training to critically examine the institution, and assisting in noticing opportunities as well as being alert of risks.

PCW 08: Interactive Content Design for Peer Role Play in Enhancing Clinical Skills Using Virtual Medical Case

Facilitator: M Arshad Ikram, Hasnain Zaffar Baloch

Institute: International Medical University, Malaysia.

Abstract:

Objectives: To provide an overview of peer role-plays in a virtual medical clinic for teaching clinical skills and assessment.

- To equip educators with skills to design effective virtual medical clinics and peer role-plays for teaching clinical skills.
- To provide participants with the resources and tools for VMC

Description:

Rationale: The use of peer role-plays in a virtual medical clinic provides an excellent platform for experiential learning and assessment. It is essential for hybrid blended learning, where students can benefit from the convenience and flexibility of online learning, while still having access to the practical experience and expertise of clinicians.

PCW 09: Development of the Entrust able Professional Activities template for Undergraduate Medical Education

Facilitator: Rahima Gabulova

Institute: Azerbaijan Medical University,

Azerbaijan.

Abstract:

Objectives:

Global trend toward a greater emphasis on learner outcomes is known as competency-based medical education is driving the development of clearer performance requirements for medical school graduates.

Description: Medical school trains and equips students with generic knowledge and abilities to facilitate the continuous development of more advanced and specialty-specific information and skills after graduation. During the workshop medical educators will discuss core basic EPAs for undergraduate students, as well as entrustment and supervision scale for this level of education. Adoption of the EPA framework in UME would allow alignment with the EPAs being developed in GME and provide a true continuum in medical training (*H. Carrie Chen, et al., 2015*).

PCW 10: Script concordance test as a measure of clinical reasoning

Facilitator: Nilufer Demiral, Yilmaz, Samira Mammadova

Institute: Ege University Faculty of Medicine Department of Medical Education, Izmir, Turkiye.

Abstract:

Objectives: At the end of the workshop participants will be able to:

- Construct a valid and reliable test
- Writes a script for the test
- Scoring of the script concordance test

Description: The script concordance test (SCT) is an innovative tool for clinical reasoning assessment. It allows testing on real-life situations that are not adequately measured with current tests. It probes the multiple judgments that are made in the clinical reasoning process.

Scoring reflects the degree of concordance of these judgments to those of a panel of reference experts. SCT is an item format that is

gaining acceptance in education in the health professions.

PCW 11: How to Promote Reflection in Our Trainees

Facilitator: Azim Mirzazadeh

Institute: Tehran University of Medical Sciences, Iran.

Abstract:

Objectives: After participation in this workshop, the participant is expected to be able to:

- Describes the basic concepts, steps, and skills of effective reflection.
- Develop a plan on how to promote reflection in your trainees as a faculty member or as a program.

Description:

Rationale: Reflection is the mainstay of lifelong learning. Despite its pivotal role in all active learning situations, usually there isn't any formal program on promoting reflection skills of students.

PCW 12: Using Multiple Choice Exam

Facilitator: Elyane Tahmazova, Nilufer Mammadova

Institute: Azerbaijan Medical University Faculty of Medicine Department of Medical and Health Science Education, Baku, Azerbaijan.

Abstract:

Objectives: The aim of this workshop is to improve the knowledge and skills on principles of measurement on written exams, including testing, test planning and construction, scoring and grading examinations, test analysis and statistics.

At the end of the training, participants will be able to:

- Write learning objectives of a training course according to the educational principles.

- Design a blueprint to obtain a valid evaluation of student learning.
- Differentiate between testing, measurement, and evaluation concepts.
- Recognize the limitations of assessment of learning.
- Write test items at different cognitive levels.
- Construct a valid and reliable test.
- Write different types of test items such as multiple choices, true or false, essay and matching.
- Recognize the strengths and weaknesses of different type of items.
- Revise poorly constructed test items and tests Calculate the test and item statistics.
- Interpret the test and item statistics.

Description:

Rationale: Evaluation and assessment are essential components of the educational process. A healthy examination system develops and directs education, give evidence for the adequacy of the form of education program, and enhances the motivation for education. Assessment performance objectively and methodically is a complex task. The results indicate how far the students have progressed in their education and whether or not the education is effective. It allows the educator and the students to evaluate the process and the outcomes (feedback).

PCW 13: Facilitate Your Learners Using OMP, Time Efficient Teaching in Clinical Practice followed by Constructive Feedback-Why, How and How Not to Do it.

Facilitator: Muhammad Nadim Akbar, Saadia Sultana

Institute: IIMCT Riphah International University, Islamabad, Pakistan.

Abstract:

Objectives

- To describe the purpose & benefits of

feedback

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

Description:

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

PCW 14: Developing and Implementing a Faculty Development Program for Senior Medical Educators

Facilitator: Ozlem Midik, Aydan Qadimli

Institute: Ondokuz Mayis University School of Medicine Department of Medical Education, Samsun, Turkiye.

Abstract:

Objective:

- To equip senior medical educators with the understanding, tools, and strategies necessary to design, develop, and implement a faculty development program. Participants will learn to identify faculty needs, formulate responsive strategies, and ensure program sustainability for long-term improvement in medical education quality. Turkish and Azerbaijan Cases will be used as context.

Description:

Rationale: The rapid changes in healthcare and pedagogical methods necessitate ongoing faculty development. This workshop is designed to enable senior medical educators

to build and deploy an effective development program, enhancing the competency of their faculty members in an era of constantly evolving medical knowledge and educational methodologies.

PCW 15: Essential Skills for Writing a Research Proposal

Facilitator: Ambreen Ansar

Institute: Wah Medical College, Wah, Pakistan.

Abstract:

Objective: At the end of the workshop the participants will be able to:

- write down a research synopsis with correct research methods & methodologies.

Description:

Rationale: Learning & demonstrating strong research skills is necessary for medical professionals. This workshop will help you in designing correct objectives and linking them to the research questions & methods, study design, sample size and research title.

PCW 16: Integrating Effective Clinical Teaching into Your Busy Workplace Practice: Tips and Techniques

Facilitator: Bilqis Hassan

Institute: Northwest School of Medicine, Peshawar, Pakistan.

Abstract:

Objectives:

- To discuss the educational characteristics of clinical teaching and its application in clinical settings
- To discuss the concept of precepting in the context of clinical teaching
- To discuss the attributes of good clinical teachers
- To discuss different strategies practiced for effective clinical teaching followed by feedback in real clinical settings.

Description: This workshop aims to help both experienced and new preceptors to become

more effective clinical teachers while maintaining their clinical workloads. The educational characteristics of clinical teaching and the precepting model in the context of clinical teaching will be discussed followed by debating on multiple strategies/models to increase teaching effectiveness.

PCW 17: Writing Smarter, Not Harder: Leveraging Artificial Intelligence to Improve the Research Work

Facilitator: Masood Jawaid, Zubia Masood

Institute: Baqai Medical University, Karachi, Pakistan.

Abstract:

Objectives: Get ready to revolutionize your research process! As with any groundbreaking technology, there will be winners and losers. But you have the power to be a winner by embracing the opportunities that ChatGPT and other AI tools offer. These tools can open a whole new world of possibilities, but they also pose significant challenges for academics. Writing a scientific research paper is a demanding task that requires critical thinking, analysis, and interpretation of data. While AI tools like ChatGPT can help streamline the research and writing process, it's important to use them wisely.

Description: In our workshop, we'll show you how to take a pragmatic approach to using AI tools effectively in your research. By following our step-by-step process, you'll learn how to leverage these tools to your advantage without sacrificing the critical thinking and analysis that are essential to producing high-quality scientific research papers. So, join us and discover how you can use ChatGPT and other AI tools to create exciting opportunities for yourself and your academic career!

- Describe AI and its role in Research.
- Literature Review with AI based tools.
- Write Scientific writing using AI tools for various research writing tasks.

- Critically thinking about the use of technology in research writing and to consider the ethical implications of relying on AI-generated content.

PCW 18: Fostering Student Success: Principles and Practices of Effective Mentoring

Facilitator: Mahwish Arooj, Kinza Aslam

Institute: University of Lahore, Lahore, Pakistan.

Abstract:

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

- Understand the role of mentors and how they contribute to the student development
- Recognize the benefits of Mentoring for medical students
- Identify the attributes and competencies of effective mentors
- Develop an understanding of the principles and practices of a successful mentor-mentee relationship
- Discuss ethical considerations and challenges that may arise during mentoring sessions in medical education
- Develop a Mentoring Program for their organization based on the principles and best practices discussed in the workshop.

Description: This workshop will equip medical colleges with the knowledge and skills to develop and implement effective mentoring programs. Mentoring programs guide and support students to navigate the medical profession, build skills and competencies, and foster a sense of community. The workshop seeks to create a nurturing environment for medical students to succeed as doctors.

PCW 19: Quantitative Research in Medical Education Choosing the Right Design and the Test

Facilitator: Madiha Sajjad, Rehan Ahmed Khan

Institute: IIMCT, Riphah International

University, Islamabad, Pakistan.

Abstract:

Objectives:

- Describe various types of quantitative research designs.
- Describe different types of quantitative data analysis.
- Align research questions with correct type of quantitative study design and analytical method.

Description:

Rationale: Medical education research is crucial in guiding changes in the delivery of medical education. However, many clinical medical educators lack the training and skills needed to conduct high quality medical education research. This workshop aims to give practical guidelines in selection of appropriate quantitative research designs and methods.

PCW 20: Getting Started with Team-Based Learning

Facilitator: Tayyaba Azhar, Hajra Talat

Institute: Fatima Memorial Hospital College of Medicine & Dentistry, Pakistan.

Abstract:

Objectives:

- Provide an understanding of TBL teaching strategy.
- Equip with necessary procedures to implement TBL in own classroom.
- Plan and conduct TBL session.
- Foster a collaborative learning environment.
- Prepare to enhance student engagement and effective strategies.

Description:

Rationale: Team-based learning (TBL) is an effective teaching strategy that promotes collaboration and active engagement among students. The TBL workshop aims to equip educators with the necessary knowledge and skills to implement TBL in their classrooms,

empowering them to create dynamic and interactive learning environments that encourage student participation and achievement.

PCW 21: Beyond the Bubble Sheet: Leveraging Post-exam Item Analysis for Improved Testing Outcomes

Facilitator: Mashaal Sabqat, Fareesa Waqar

Institute: IIMC-T Riphah International University, Islamabad, Pakistan.

Abstract:

Objectives:

- This workshop aims to provide an overview of post-exam item analysis, develop skills in identifying errors in assessment through item analysis, provide strategies for improving item quality, demonstrate how to use assessment data to improve assessment quality, and encourage collaboration and sharing of best assessment practices among workshop participants.

Description:

Rationale: Effective assessment practices are critical in ensuring that health professionals are adequately prepared to provide safe and effective care to patients. By utilizing post-exam analysis, educators can identify errors, and enhance the validity and reliability of their assessments, ultimately improving the overall quality of health professions education and patient outcomes.

PCW 22: Logical Fallacies in Medical Education: Improving Critical Thinking for Future Healthcare Professionals

Facilitator: Fahad Azam, Abida Shaheen, Saira Akhlaq

Institute: Shifa Tameer E Millat University, Islamabad, Pakistan.

Abstract:

Objectives: At the end of this workshop, participant will be able to:

- Recognize common logical fallacies in medical education.
- Use critical thinking skills to avoid fallacious reasoning.
- Evaluate medical information critically
- Improve their communication skills by avoiding common fallacious arguments.
- Promote ethical and responsible reasoning by avoiding manipulative or deceptive practices.

Description:

Rationale: Recognizing common logical fallacies can help medical educators to improve critical thinking. This workshop aims to equip medical educators with the knowledge of common logical fallacies. Understanding fallacies can help healthcare professionals to improve critical thinking, avoid errors in decision-making, evaluate medical information, enhance communication skills, and foster ethical reasoning.

PCW 23: Using Evidence Based Leadership Competency Model to Develop Leadership skills in Medicine and Healthcare

Facilitator: Fadil Citaku

Institute: Academy of Leadership Sciences Switzerland, Switzerland

Abstract:

Objective:

- To identify and empirically investigate the dimensions of leadership in medical education and healthcare professions.

Description: A population-based design with a focus group and a survey were used to identify the perceived competencies for effective leadership in medical education. The focus group, consisting of five experts from three countries (Austria n=1; Germany n=2; Switzerland n=2), was conducted (all masters of medical education), and the survey was sent to health professionals from medical schools and teaching hospitals in six countries (Austria, Canada, Germany, Switzerland, the UK and the

USA). The participants were educators, physicians, nurses and other health professionals who held academic positions in medical education. A total of 229 completed the survey: 135 (59.0%) women (mean age=50.3 years) and 94 (41.0%) men (mean age=51.0 years). A 63-item survey measuring leadership competencies was developed and administered via electronic mail to participants. Exploratory principal component analyses yielded five factors accounting for 51.2% of the variance: (1) social responsibility, (2) innovation, (3) self-management, (4) task management and (5) justice orientation. There were significant differences between physicians and other health professionals on some factors (Wilk's $\lambda=0.93$, $p<0.01$). Social responsibility was rated higher by other health professionals ($M=71.09$) than by physicians ($M=67.12$), as was innovation (health professionals $M=80.83$; physicians $M=76.20$) and justice orientation (health professionals $M=21.27$; physicians $M=20.46$).

The results of the principal component analyses support the theoretical meaningfulness of these factors, their coherence, internal consistency, and parsimony in explaining the variance of the data. Although there are some between-group differences, the competencies appear to be stable and coherent.

In this workshop the evidence-based model above will be used to serve the participants to enhance their leadership skills. In addition, Çitaku's metacognition method will be used to learn how to enhance each leadership competency incorporated in this model.

PCW 24: Role Modeling – A Powerful Teaching Strategy

Facilitator: Azhar Rashid, Shamaila Burney

Institute: IIMC-T Riphah International University, Islamabad, Pakistan

Abstract:

Objectives: At the end of the workshop the participant will be able to:

- Appreciate the significance of the role model in medical teaching and practice.
- Identify the types of role modeling in medical education and clinical practice.
- Describe the attributes necessary for the teaching faculty and the clinicians as role models.
- Apply strategies for role modeling in teaching and clinical practice.

Description:

Rationale: A teacher's influence is ever lasting. Today, in the fast-changing world of knowledge, technology and culture, machines and materialism are becoming dominant forces. It is imperative to develop teachers as role models, high in professionalism, ethics, and values with leadership qualities for the continuity of quality medical professionals.

PCW 25: Crafting Your Professional Story: A Guide to Developing Your E-Portfolio

Facilitator: Saima Rafique, Kainat Javed

Institute: University of Lahore, Lahore, Pakistan.

Abstract:

Objective: By the end of the workshop, participants will have:

- a better understanding of how to present their skills and experiences in a compelling way through their e-portfolio.

Description: An e-portfolio is a valuable tool for showcasing one's skills and achievements to potential employers or clients. This workshop will provide participants with the knowledge and skills necessary to develop an effective e-portfolio that showcases their professional accomplishments.

PCW 26: Learning to Lead: A Framework for Teaching Quality, Safety and Reliability

Facilitator: Paul Barach

Institute: Thomas Jefferson University; USA

Abstract:

Objectives:

- Learn to understand the importance of standardization of all processes to improve outcomes.
- Enhance your expertise in quality, safety and develop practical skills that they can be used to teach safety, quality, and operational improvement.
- Be introduced to applied human factors methods used to measure and improve clinical processes in a complex social technical system.
- Learn about the importance of the principles of “as low as reasonably achievable (ALARA)” and “As high as conceivably achievable (AHACA)” to help assess and reduce bedside procedural risks.
- Learn to build and manage highly productive teams using practical team tools such as Timesteps, huddles and walkarounds with a huge impact on students and healthcare providers in training.
- Describe how cognitive biases contribute to diagnostic and medication errors and discuss the epidemiology of diagnostic and medication errors.
- Cultivate a toolkit of strategies to address challenges encountered in solving problems related to the interplay of quality, safety, and reliability in patient care.

Description:

Rationale: This workshop will assist medical educators and clinicians in understanding, developing, and implementing an effective training program to address risk management and patient safety challenges and prepare them to lead the training, assessment and support of patient safety and quality improvement training and sustainability

challenges.

Recent clusters of adverse events have shined a bright light on the safety, quality, and human factors of care. This Workshop will introduce contemporary concepts of high reliability leadership and management. Participants will learn about all areas influencing leadership, setting up safety and quality programs, including patient safety, communication, mentoring, process, and quality improvement, change management, and research.

Taking a fresh look at these tools, we will examine practical ways to make them effective and improvement-focused by practicing skills in a range of core safety tools and focusing on turning learning into improvement as an effective way to prevent harm. Approaches will include improvement interventions, adaptive learning, strategies for culture change, necessary technology and infrastructure, monitoring, and the synergies among these elements. Participants will leave with tools, strategies, and a plan to teach and train on system resilience, and how to best improve the competencies of your students in reliable care.

PCW 27: Rethinking Assessments: Considerations for Getting Open Book Examinations Right

Facilitator: Vishna Devi V Nadarajah

Institute: International Medical University, Malaysia.

Abstract:

Objectives:

- Discuss the educational objectives of open book examinations based on evidence.
- Identify learning outcomes that can be appropriately assessed using open book examinations.
- Explore the practical considerations for planning and conduct of open book examinations.

Description:

Rationale: In view of the exponential growth of knowledge, increasing efforts have been directed towards teaching and learning strategies that promote graduate work readiness. Similarly, a rethink of assessment methods is necessary to ensure that students' competencies are appropriately assessed for successful graduate outcomes. Open book examination (OBE) is one such tool that is increasingly being used in health professions education (HPE).

Nevertheless, OBE has been used more widely and longer in other professions for both under and post graduate programmes. For HPE despite claims of promoting deep learning, problem solving and analytical thinking among the students, there is insufficient uptake to support its use thus far. Why is this so? Clearly, the implementation of OBE needs to be carefully planned in alignment with the learning outcomes and assessment blueprint of an academic programme. However, there are realities and myths associated to OBE that is useful to clarified. In this workshop, both evidence based and practical considerations for OBE will be discussed for meaningful implementation in HPE.

PCW 28: Construction of Multiple-Choice Questions and Technical Item Writing Flaws

Facilitator: Rehmah Sarfraz, Memoona Mansoor

Institute: Islamabad Medical and Dental College, Islamabad, Pakistan.

Abstract:

Objectives: By the end of this three-hour workshop, the participants will be able to:

- Differentiate between various types of Multiple-Choice Question format.
- Construct Type-A Multiple Choice-Questions.
- Identify the technical item writing flaws.

Description: Multiple-Choice Question is a valid and reliable tool to assess recall and application of knowledge. This workshop will provide a valuable hands-on experience for professional development of participants in terms of improving their assessment practices and student learning outcomes.

PCW 29: Motivating the Interprofessional Digital Learners

Facilitator: Saima Batool, Saima Rafique

Institute: University of Lahore, Lahore, Pakistan.

Abstract:

Objectives:

By the end of this interactive workshop, the participants will likely to be able to

- Describe the learning theories for the interprofessional learner's motivation.
- Relate their past practices of arousing/enhancing motivation of/for learning and facilitating the learners.
- Discuss the core competencies of interprofessional education.

- Discuss the skills for engaging the 21st century digital learners.

PCW 30: Art of Research Article Writing

Facilitator: Madiha Anees

Institute: Rehman Medical Institute, Peshawar, Pakistan.

Abstract:

Objectives: Upon completion of the workshop, the participants will be able to:

- Develop research title from a topic.
- Justify the chosen topic.
- Describe the current state of knowledge on the topic through literature search.
- Formulate hypothesis.
- Describe methods of conducting a research
- Interpret Results

Description: In medical education, conducting research will build an insight for keeping up to date and bringing new advancements in health research. The art of article writing will emphasize the importance of research in medical education and provide step to step guide in conducting research.



CONFERENCE WORKSHOPS

CW 1: Title: Resilience: Harness Your Inner Strength for Personal and Professional Well Being

Facilitators: Sonia Ijaz Haider

Institute: Dow University of Health Sciences, Karachi, Pakistan

Abstract:

Objectives:

- Discuss resilience and its relevance to personal and professional roles.
- Identify behaviors which strengthen and undermine resilience.
- Practice strategies for developing and sustaining resilience
- Develop personal resilience plan.

Description: Resilience is an attribute which is much needed to be taught and developed in healthcare professionals who are constantly exposed to the stressors of life. Building resilience contributes to positive workplace morale, high-quality care, reduced risk of burnout, and an overall improved quality of life. It helps to withstand adversity and bounce back from difficult life events. Through this workshop, participants will discuss practice strategies for sustaining resilience for their personal and professional well-being.

CW 2: Title: Student Centered Learning How Can It Work in Daily Life and How Is It Related to Curriculum Mapping?

Facilitators: Jörg Goldhahn, Olaf Ahlers

Institute: ETH Zurich, Switzerland

Abstract:

Objectives: At the end of this workshop the participants can:

- Explain the different aspects of the curriculum (planned, taught, learnt), which are needed to achieve student-centered learning.

- Describe how a congruence between the different aspects of the curriculum can be ensured.
- Propose a concept for the different aspects of the curriculum for their own faculty.
- Use the provided content and experiences of the experts to reflect on changes in their own curriculum to provide a student-centered learning environment.

Description: The organizers will present a short overview of their experiences with the whole 'chain' from curriculum development and the mapping of the planned curriculum, over curriculum-evaluation and formative/summative assessment to student centered learning. Participants will then define their own needs for these topics and will start working on concepts for their own faculties. Each organizer will supervise a small group of participants during the entire process. The workshop will conclude with examples of concepts and take-home packages.

CW 3: Title: Problem Based Learning Teaching Strategy

Facilitators: Sana Iqbal, Rahila Yasmeen

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Objectives:

- Discuss the philosophy, concepts, principles, and process of PBL.
- Demonstrate effective group dynamics and assigned roles during roleplay of the PBL session.
- Identify various assessment methods used in the evaluation of student's performance during a PBL.

Description: The faculty members will orient with the PBL facilitation skills and will be able to apply the concepts at their workplace with hands-on practice. This workshop will refresh their knowledge, skills, and attitude about PBL in an integrated medical curriculum.

CW 4: Title: Ace The Presentation With Multimedia Skills

Facilitators: Zubia Masood, Masood Jawaid

Institute: Baqai Medical University, Karachi, Pakistan

Abstract:

Objectives: By the end of this session students will be able to:

- Deliver effective presentation based on principles of multimedia.

Description: Presentation skills are fundamental skills in various professional settings. A person with strong presentation skills can capture and maintain the attention of the audience, deliver information in a structured and coherent manner, and create a positive and lasting impression. Multimedia is widely used for delivering effective presentations. The theory of multimedia principle by Meyers suggests that words and images evoke different conceptual processes, and that perception and learning are active, constructive processes. By attending this workshop, learners will be able to deliver effective presentations based on principles of multimedia.

CW 5: Title: Design and Facilitate an Effective Role-Play Session for Health Sciences, Medical, and Dental Students

Facilitators: Khabab Elhag, Nadein Ali Saeid, Nada Ben Ali

Institute: Libyan International Medical University LIMU, Libyan Arab Jamahiriya

Abstract:

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

- Define the role-play and explain its benefits for health, medical, and dental students.
- Recognize the different types of role-play.
- Design effective role-play scenarios.
- Facilitate safe, supportive, and productive role-playing sessions.
- Provide positive and constructive feedback to participants.

Description: This workshop is designed to provide the participants with the necessary knowledge and skills for them to organize role-play sessions with high efficiency to achieve the best educational objectives. And it will help participants improve their communication, problem-solving, and decision-making skills. The workshop could be structured into the following six sessions as follows:

- Introduction to role-playing, its benefits, and different types.
- Design effective role-play scenarios.
- Facilitate role-play sessions in a safe, supportive, and productive way.
- Provide constructive and positive feedback.
- Role-play simulation.
- Evaluation of participants' skills and knowledge.

CW 6: Title: Beyond Numbers: Introduction to Qualitative Research in Health Professions Education

Facilitators: Saira Akhlaq, Fahad Azam, Abida Shaheen

Institute: Shifa Tameer-e-Millat University, Islamabad, Pakistan

Abstract:

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

- Identify appropriate mixed-methods research designs in health professions education.
- Apply the fundamental principles of mixed-methods research in the context of Health Professions Education.
- Develop research questions for mixed-methods research in Health Professions Education.
- Appreciate the role of appropriate sampling techniques and data collection procedures for mixed-methods research in Health Professions Education.
- Identify appropriate data analysis techniques to analyze and interpret mixed-

methods research in Health Professions Education.

Description: The integration of mixed-methods research approaches with the field of Health Professions Education (HPE) has gained significant attention in recent years. This workshop aims to provide faculty members, educators, and researchers in the medical field with necessary knowledge and skills to effectively utilize mixed-methods research in their HPE studies. By combining quantitative and qualitative research methods, mixed-methods research offers a comprehensive approach to understand the complex dynamics and phenomenon in HPE, allowing for a deeper exploration and richer interpretation of research findings.

CW 7: Title: Assessing the Quality of Clinical Competence: Designing an Objective Structured Clinical Examination (OSCE) For Medical Students

Facilitators: Shabana Ali, Raheela Yasmeen

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Objectives:

- Discuss the tools used for the assessment of clinical competence given in Miller's pyramid.
- Relate the role of assessment tools in the attainment of clinical competence in medical students.
- Evaluate the role of OSCE in the assessment for & of learning in medical students.
- Design OSCE using a rating scale and checklist

Description: The Objective Structured Clinical Examination(OSCE) is a versatile, reliable and valid multipurpose assessment tool that can be utilized to assess health care professionals in a clinical setting. It assesses competency, based on objective testing through direct observation. It allows uniform testing of

students for a wide range of clinical skills such as history taking, clinical examinations, communication skills. The OSCE has been used to evaluate those areas most critical to performance of health care professionals, such as the ability to obtain/interpret data, problem-solve, communicate, and handle unpredictable patient behavior.

CW 8: Title: Curriculum Mapping & Upgradation: How to Write/ Align/ Upgrade the Learning Outcomes

Institute: Islamic International Medical College, Riphah International University, Islamabad, Pakistan

Facilitators: Saadia Sultana, Madiha Sajjad, Muhammad Nadim Akbar Khan

Abstract:

Objectives: Alignment of -Curriculum with - Mission & Vision of the institution.

1. Outcome based Education by constructing:
 - Overarching outcomes-Level-1
 - Module outcomes-Level-2
 - Learning Outcomes-Level-3
2. formation of Higher order learning objectives where and when required.
3. Further alignment of LOs, T&L method. & Assess.
4. Curriculum mapping

Description: Innovations in education; both require constant changes of medical curricula. Integrated curriculum requires a lot of energy, time, logistics, etc.to implement it in true letter and spirit .A curriculum reform is a dynamic process, and as the system matures, several changes are likely to be introduced. In this workshop hands-on practice on the following skills will be ensured after introductory interactive session Alignment of -Curriculum with - Mission & Vision of the institution. 2. Constructing: different levels of Learning Outcomes- 3. Formation of Higher order learning objectives. 4. Further alignment of LOs, T&L method. & Assess. 5. Curriculum mapping

ORAL PRESENTATIONS

Title: Perceptions of Medical Undergraduates about “Student Engagement as Leaders” in an Established Private Medical School of Pakistan

Author: Saadia Sultana

Institute: IIMCT Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Student engagement occurs when young people willingly invest their energies and commitment to the learning environment, both within and outside the classroom. This study sought to know about the perceptions among students who chose to become highly engaged about the opportunity/free hand provided to them about their engagement.

Methods: Between July and September 2021, 35 students who assumed management roles within the Colleges Program were queried with open-ended questions about their engagement. Qualitative analysis of the written responses was independently performed by two investigators; coding was compared for agreement. Content analysis identified major themes.

Results: 35 students (97%) completed the questionnaire. Motives that emerged as reasons for getting involved included: endorsing the need for the program; excitement with the start-up; wanting to give back; commitment to institutional excellence; and collaboration with talented peers and faculty. Perceived benefits were grouped under the following domains: connecting with others; mentoring; learning new skills; and recognition. The most frequently identified drawbacks were the time commitment and the opportunity costs. Ideas for drawing medical students into new endeavors included: creating defined roles; offering a breadth of

opportunities; empowering students with responsibility; and making them feel valued.

Conclusion: Medical students took on different leadership roles in curricular/extracurricular activities. Their excitement, satisfaction, commitment, and enthusiasm may prove helpful to others hoping to engage students as leaders in learning communities.

Title: Association Between Sleep Patterns and Academic Performance among Medical Students

Author: Sobia Hassan

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Adequate sleep is vital for memory reinforcement which is essential for academic excellence whereas Insufficient or disturbed sleep causes poor attention and cognition. The objective of the study is to create awareness about varying sleep patterns and its impact on cognitive performance and general wellbeing of medical students.

Methods: An online detailed questionnaire was distributed among medical students of both genders from different medical institutions across Pakistan. A questionnaire was constructed for assessing the correlation between sleep patterns and academic performance of medical students. Data description was gathered and then analyzed with statistical software SPSS and percentage analysis was performed. Chi-square test was applied for association analysis. A phenomenological study design was used with purposive sampling. A total of 18 academic and administrative leaders of medical and dental colleges in various cities in Pakistan were included. Semi-structured interviews were conducted online.

Results: The online questionnaire was circulated among medical students to assess the correlation between sleep patterns and

their academic performance. 399 students constituting of 116 male participants and 283 female participants completed the questionnaire. Incomplete questionnaires were discarded from the study. The data was analyzed using SPSS and Chi-square test was applied. Results clearly demonstrated that the sleep patterns correlate with the attention span and academic performances of students throughout the year. Students who had healthy sleep cycles were more focused, attentive in classes and did well in exams as well in comparison to sleep deprived students. The thematic analysis of the data was done by using NVivo pro 12 software. A total of 4 themes, 14 sub-themes, and 90 codes emerged. The four main themes included: 1. Digital leaders, 2. Digital transformation, 3. Digital skills and 4. Differences in leadership. These themes covered the behaviors and practices of current digital health profession education leaders. Their perceptions on the concept of digital leadership in health education; digital leadership styles and attributes; challenges in digital leadership; policies for incorporating digital transformation in health education; digital skills required in health education.

Conclusion: Sleep pattern can significantly influence the academic and general wellbeing of Medical students so creating awareness about benefits of healthy sleep is imperative for their personal and professional development. The results of the study highlighted that it is crucial to understand the intricacies of digital leadership and implement measures to support the health education leaders' role in digital era.

Title: Peer Role-Play Simulation: Can it Enhance Clinical Learning among Undergraduate Medical Students?

Author: Muhammad Arshad Ikram

Institute: International Medical University,

Malaysia

Abstract:

Aims: International Medical University introduced a virtual platform for teaching when access to the clinical environment was limited. Clinical cases were prepared using the latest e-Learning tools such as Articulate Storyline 360 or Vyond. The objective was to empower students for flexible participation whereby students may choose to attend face-to-face in-person or virtually without physically attending the class. Peer role-play (PRP) is a simulation-based teaching method that actively engages students in scenarios by assigning specific roles. When combined with technology, PRP becomes a powerful educational tool that enables students for active and positive clinical learning.

Methods: A simulated case of a traumatic hip dislocation was prepared with three (3) fourth-year medical students. Two acted as attending emergency doctors and one played the role of a patient involved in a motor vehicle accident. A complete interactive virtual clinical medical case (VMC) with video-based content, and quizzes on the anatomy of the hip is available for students to access via the IMU e-Learning portal for Self-Directed Learning.

Results: An online survey to acquire the perception of students for PRP in a VMC was conducted. A total of 141 students participated in the survey. The questionnaire showed good internal consistency (Cronbach alpha = 0.932). 99.3% of students perceived PRP as a good tool to enhance clinical learning that helped them prepare for the real clinical environment. 95% of students appreciated the fact that they were able to revisit the case at their convenience.

Conclusion: Student PRP is an innovative form of virtual teaching that provides a positive learning experience, insights into case-based learning, and fosters critical thinking. It empowers students by allowing them to actively participate in the design and

development of virtual clinical cases, thereby enhancing their learning. Furthermore, it helps students develop confidence in their ability to handle clinical situations, provides opportunities for reflection, and encourages self-evaluation.

Title: Leading Through Digital Transformation: How Health Education Leaders' Behaviors and Practices Adapt"

Author: Sana Iqbal

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: COVID-19 has resulted in a rapid shift towards digital transformation in all aspects of life, including education. Challenges emerged, requiring new leadership with unique abilities to manage the transformation. This study explores the impact of digital transformation on the behaviors and practices of medical and dental educational leaders in Pakistan.

Methods: A phenomenological study design was used with purposive sampling. A total of 18 academic and administrative leaders of medical and dental colleges in various cities in Pakistan were included. Semi-structured interviews were conducted online.

Results: The thematic analysis of the data was done by using NVivo pro 12 software. A total of 4 themes, 14 sub-themes, and 90 codes emerged. The four main themes included: 1. Digital leaders, 2. Digital transformation, 3. Digital skills and 4. Differences in leadership. These themes covered the behaviors and practices of current digital health profession education leaders. Their perceptions on the concept of digital leadership in health education; digital leadership styles and attributes; challenges in digital leadership; policies for incorporating digital transformation in health education; digital skills required in health education.

Conclusion: The results of the study

highlighted that it is crucial to understand the intricacies of digital leadership and implement measures to support the health education leaders' role in digital era.

Title: Perspectives of Teachers Regarding Assessment: Establishing Construct Validity of Assessment Implementation Measure (AIM) Tool

Author: Amara Butt

Institute: Rawal Institute of Health Sciences, Islamabad, Pakistan

Abstract:

Aims: This study aims to establish the construct validity of the Assessment Implementation Measures (AIM) tool to assess the accuracy of an instrument. This helps to establish if the instrument is measuring what it intended to measure so that it can be used in variety of settings. With the help of this tool, we can find the perspectives of faculty regarding implemented systems of assessment in their institutions that would help to bridge the gap between implemented and set standards of assessment.

Methods: A quantitative cross-sectional analytical study design was used with quantitative items. It was a 30-item tool. Sample size was calculated using 1:10 item-to-participant ratio. Hence data was collected from 313 participants. Participants were senior faculty members (senior registrar and above) involved in teaching and assessment of undergraduates from various medical and dental colleges in Pakistan. The questionnaire was made on google forms and distributed to participants using email and WhatsApp. The data was analyzed using IBM AMOS SPSS version 24.

Results: Confirmatory factor analysis was done to establish construct validity. The indices of Confirmatory factor analysis of the tool showed discrepancy. To remove this discrepancy, we had to remove the items

whose item loading values were weak. In the end the tool was reduced to 13 items belonging to 3 domains.

Conclusion: The final model was improved by excluding items from the original model. A re-validation study with careful selection of experienced participants from various institutional backgrounds having baseline knowledge of medical education is suggested to improve the results.

Title: Development and Validation of Technology Enhanced Learning Environment Evaluation Tool (TELEET)

Author: Fizza Anwar

Institute: Foundation University College of Dentistry, Foundation University, Islamabad

Abstract:

Aims: An explicit rise of technology enhanced learning (TEL) has taken place due to increased access of internet to medical students all over the world. This study was conducted to develop and validate a tool that can evaluate the Technology enhanced Learning Environment in an undergraduate medical/dental school.

Methods: This is a mixed methods study, to develop an instrument, with sequential qualitative and quantitative components. The study was done in seven phases. a thorough literature review, followed by validation through 2 rounds using modified Delphi Technique Cognitive pretesting was conducted on ten students. Pilot testing was carried out using sample size of 375 participants (three hundred and twenty-five responded). Construct validity of the tool was established through confirmatory factor analysis. Reliability of the questionnaire was determined through Cronbach's Alpha.

Results: Three main areas were identified from the literature review. A pre-liminary 21 item instrument was sent for validation to experts. Content Validity- items of $\alpha = 0.70$ were

removed. Content Validity Scale was 0.90 and Content Validity Universal Agreement was 0.61. Cognitive pretesting was done on 23 items resulting in modification of four items. CFA was done which removed items with poor factor loading. The reliability was calculated using Cronbach's Alpha $\alpha = 0.79$ which is a good acceptable range. The final instrument developed had twenty items on five-point Likert scale of agreement.

Conclusion: The study outcome (instrument) would provide additional benefits to the national and international regulatory bodies/institutes to set a specific standard for the quality of technology enhanced learning environments.

Title: Development of Entrustable Professional Activities for Dental Radiology Undergraduate Curriculum Using Modified Delphi Method

Author: Faiza Gulfam

Institute: Rawal Institute of Health Sciences, Islamabad, Pakistan

Abstract:

Aims: Lack of standardized and structured dental radiology undergraduate curriculum results in inadequate undergraduate dental training, adversely affecting the diagnostic skill. The aim of this study was to identify Entrustable Professional Activities for undergraduate dental radiology curriculum along with the respective competencies, assessment strategies, and appropriate supervision level through expert consensus.

Methods: A modified Delphi study with two iterative rounds used a questionnaire with 5-point Likert scale. Round 1 questionnaire, comprising of 8 EPAs and their 123 competencies, 5 supervision levels and 7 assessment strategies, was sent to 42 experts. The Round 2 questionnaire, revised based on consensus and qualitative feedback, was sent to 30 participants. Stability test was conducted

to compare consistency of the two rounds.

Results: The study identified a final set of six EPAs with 89 competencies for undergraduate dental radiology through expert consensus including prescribing dental imaging modalities, obtaining informed consent, performing patient assessment, and developing suitable treatment plan, interpreting intraoral radiographs, communicating their results and performing chairside digital radiography. Consensus was achieved for 5 EPAs and 75 competencies in round 1 and 1 EPA and 14 competencies in round 2. McNemar test revealed maximum responses with high stability.

Conclusion: The study developed 6 EPAs with 89 competencies for dental radiology undergraduate curriculum that can help in implementation of a competency-based framework for undergraduate dental radiology curriculum.

Title: Teaching and Learning in the Skill Lab: Perception of Final Year MBBS Clerkship Students

Author: Saadia Sultana

Institute: IIMC-T Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Simulators have become a common tool in medical education, allowing students to develop and practice their skills in a controlled environment. Study was designed to make out the perceptions of clerkship students about their learning in the skill lab to explore the influences that augment or hinder it.

Methods: Qualitative analytic study from January-June 2021 –at IIMC, Railway Teaching Hospital, Rawalpindi, Pakistan. Purposively enrolled 50 students and 36 responded. Students who volunteered to participate out of the student's batch for the clerkship rotation in Obstetrics and gynecology were recruited. They were taught different essential skills on

the simulators in the skill lab. They had spent at least six weeks. Data Collection Instrument. Enquired through open-ended questionnaire about their experience. Qualitative analysis of the students' responses was carried out by two researchers. They review and discuss each other's coding, generated codes, themes were identified, and thematic analysis done.

Results: Thirty-six students, 14 males and 22 females participated. students expressed satisfaction on wide range of opportunities of learning on high and low fidelity simulators; feeling of responsibility of their own learning; perception of being empowered and they feel independent and confident. Benefits perceived by the students were grouped as: knowledge of innovative skills and attitudes; team building; group work; practicing drills for emergencies; better linking with clinical fraternity; learning the behaviorism and attitudes of a professional. The most acknowledged drawbacks were the shortage of time, balance between Studies, wards etc. Shortage of space, time, and improper management of skill-lab

Conclusion: Positive perception of students about learning in skill-lab is satisfying for institution aspiring towards excellence in integrated curriculum and it may also be helpful to medical schools reforming their curricula.

Title: What is the Impact of a Portfolio on Postgraduate Trainees in Terms of Reflection, Assessment and Outcomes of Competency?

Author: Fareesa Waqar

Institute: IIMCT Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Discuss the background and an educational rationale for portfolio-based learning and assessment in medical education. Examine how and where portfolios have been used for professional development in medical education. (Objective) The portfolio is an

effective instrument for the collection of work-based Learning, Assessment, Feedback, and Understanding of the knowledge recently.

Methods: Postgraduate trainees were divided into two groups A and B. Group Postgraduate trainees were given the task of self-reflection, Personal performance, and Learning strategy to improve patient care and to take responsibility for their learning. Group B was those Postgraduate trainees who were assessed by another method of assessment including OSCE and MCQs. After being taught two different methods both groups had a pretest and a post-test comprising MCQs and OSCE. The pre-test and post-test consisted of questions related to knowledge. The two groups were compared on their knowledge and skills. It is being used as an assessment tool in many countries.

Results: A total of 10 postgraduate trainees participated. There were 6(31.8%) postgraduate trainees in group A and 4(68.1%) trainees in group B. The overall mean age of the trainees was 25.57 ± 2.17 years in group A and 25.40 ± 1.84 years in group B ($p=0.14$). Group B performed much better in skill with a mean OSCE score of 8.87 ± 0.10 compared to group A which had mean OSCE score of 5.54 ± 0.13 ($p=0.004$). It was seen that portfolios had impact on the trainees in terms of reflection, patient care, and improved academic performance.

Conclusion: The use of portfolio helps with the reflection, collection of information, and integration of knowledge.

Title: Is Delivery Simulation Manikin as Effective as a Theoretical Mechanism of Labor in Understanding Labor

Author: Fareesa Waqar

Institute: IIMCT Riphah international university, Islamabad, Pakistan

Abstract:

Aims: Aim is to teach the actual process of

delivery through delivery manikin as compared to theoretical lecture.(Objective):To assess the impact of simulation for labor and delivery on the knowledge and skills of undergraduate medical students. A simulation is a useful tool that may help the students to practice in a real environment.

Methods: A nonprobability sampling technique was used. Students in Group A observed delivery on a delivery manikin as compared to group B in which students were delivered a lecture. Group B was taught the mechanism of labor theoretically. Group A was taught delivery on manikin simulating mechanism of labor. The students were given a pre and posttest . The two groups were compared on their knowledge and skills. The results were significantly better in group A as compared to group B with a significant P value.

Results: The simulation process is common in medical education and gives more benefits to the students as compared to the theoretical learning. The two groups were compared on their knowledge and skills. Simulation-based teaching showed significantly better results. Simulation has also been shown to be a reliable tool for assessing learners and for teaching topics such as teamwork and communication. This study has shown the effectiveness of simulation in the teaching of clinical science in terms of clinical knowledge and procedural skills.

Conclusion: Students take a greater interest in skills-based learning. The simulation-based teaching process is more effective as compared to lecture-based teaching.

Title: Attitude of the Students of Azerbaijan Medical University to Multidisciplinary Consilium Classes

Author: Mahir Mahmudov

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: The goal of medical education is the development of clinical competence. The study of student's feedback is important criteria used to assess the quality of teaching. The aim of the study is to identify the attitudes of IV-VI-year students toward the classes conducted in the format of multidisciplinary consilium.

Methods: Physicians of various specialties, students attend the classes in a hybrid format. Based on an anonymous survey, students were asked the following questions: Is the necessary information about the patients provided during consilium classes?, Are the results of patient examinations related to their problems?, Are the results of the visualization methods (USG, CT, MRI, EndoUs etc.) shown on the screen explained?, Are there opportunities for students task question(s) about the patient?, Is there enough explanation of the performed or planned surgical operation?, Have the consilium classes changed your view of the problem?, Is it useful to attend consilium classes?

Results: A total of 786 (70,05%) questionnaires were recognized as valid from 1122. 87.7% of the students said that they were given the necessary information about the discussed patients, 88% confirmed that the results of the examinations were associated with pathology, 87.2% said that the results of imaging examination methods (USG, CT, MRI, EndoUs, endoscopy) were explained, 94% approved that students were given the opportunity to ask question(s), 71.5% said that the course and explanation of the performed or planned surgical operations was provided, 88.4% approved that the consilium lessons have changed their views about pathology, 88.9% confirmed the usefulness of these lessons.

Conclusion: Consilium classes play an important role in the development of clinical thinking, knowledge, practical skills, and competencies of medical students, and thus

the formation of competent doctors.

Title: 1001 Nights the Impact of Arabic/Islamic Civilization on Medical Education

Author: Omar Alhussaini

Institute: Free lancer, Oman

Abstract:

Aims: Review of the impact of Arabic/Islamic civilization on medical education from the time before Islam until the fall of the Abbasid Empire mid of the thirteenth century A.D.

Methods: Great emphasis on the importance of communication skills, ethics, licensing and attitudes towards patients and basis of research. One example of many, mentioned in the presentation, the first licensing process was established in Baghdad during the Caliph Al-Muqtadir reign at the end of 10th century.

Results: Many of the current trends in medical education basis were laid down many centuries back by the so-called Hakeem, an Arabic word meaning the wise, knowledgeable, and experienced chief of physician.

Conclusion: Our ancestors have played a major role in setting up the current trends and practice in medical education.

Title: Enhancing Medical Students' SAQ Skills: An Online Near-Peer Teaching Programme in the UK

Author: Gurtek Singh Samra

Institute: University of Leicester, United Kingdom

Abstract:

Aims: Evaluate the impact of near-peer teaching on student confidence in answering SAQs.

Methods: A novel online near-peer teaching programmed was developed for medical students across the UK, with a focus on SAQs. The programmed consisted of six online sessions; whereby pre-clinical medical

students were taught by clinical year medical students. Before and after each session, quantitative data was collected regarding student confidence on the topics covered using a Likert scale (1=not confident, 5=very confident). A paired t-test was used to analyse the data for any significant difference.

Results: Student attendance per session: n=41, 42, 54, 62, 61, and 79 Results showed an average increase in student confidence by 62.6% across the various domains, including anatomy, gynecology, renal medicine, etc. After each session, there was a statistically significant increase in student confidence across all teaching domains ($p < 0.0001$). On average, students reported an increase in confidence from 2 to 4 on the Likert scale.

Conclusion: The findings strongly support near-peer teaching for SAQs as an approach to enhance student learning. It may be beneficial for medical schools to incorporate near-peer teaching programmed within their curriculum.

Title: Integrated Multimodal Online Anatomy Practical Session: Its Impact on Students' Cognitive Load, Learning Engagement and Test Performance

Author: Siti Nurma Hanim Hadie

Institute: Universiti Sains Malaysia, Malaysia

Abstract:

Aims: To develop an integrated multimodal online anatomy practical instruction and investigate its impact on students' learning.

Methods: The integrated multimodal anatomy practical session was adapted from a teaching framework that was developed according to the results of a scoping review, a narrative review, and two key informant surveys that identified the elements of effective anatomy teaching. The impact of this instruction on students' learning was compared with a routine online anatomy practical session (control group), in a randomized-controlled trial involving 140 first-

year medical students from a public institution in Malaysia. The students' cognitive load, learning engagement, and pre-post practical test performance were measured; and the scores were analyzed and compared between the study groups.

Results: The analyses reveal no significant between-group difference of the intrinsic and extraneous load scores; however, the students in the integrated multimodal session have significantly higher self-perceived learning score reflecting higher germane load. Likewise, the cognitive, physical, and emotional engagement scores were significantly higher in the integrated multimodal practical group than those of the control group. Additionally, the integrated multimodal group outperformed the control group in the test performance with significantly higher post-practical test, learning quotient, and improvement of the pre-post test scores. This instruction has shown to have high impact on students' test performance evidenced by large Cohen effect size.

Conclusion: This study provides a valuable insight on the effectiveness of integrated multimodal online anatomy practical session. However, further research may explore its flexibility and applicability in the face-to-face setting. The findings of this study suggest that a lifestyle medicine intervention program can significantly improve health outcomes in chronic dis, therefore should be integrated in primary healthcare settings.

Title: Peer-Assisted Learning of Medical Physiology

Author: Tamara Valishvili

Institute: Akaki Tsereteli State University, Georgia

Abstract:

Aims: Our goal is to increase motivation and interest of our students in studying. Our last challenge in this area was the implementation.

Methods: The authors developed

questionnaire that were filled out by a random sample of students who have participated in near-peer teaching.

Results: According to our survey, most of the students stated that they would recommend peer-assisted classes to others, they found these classes interesting, informative. But some students mentioned what kind disadvantages this method has: for example, that student-teacher could use more effectively audio-visual media. The prevalence of peer-assisted learning (PAL) featuring alongside the traditional medical curriculum is increasing; however, the evidence base for PAL's efficacy on academic performance is limited. We evaluate in our study whether PAL confers a benefit in specific educational courses. Our goal was to create interesting innovative physiology course with peer-assisted teaching as a flexible alternative to

Conclusion: Peer teaching has been incorporated in ATSU medical schools' curriculum to teach physiology. It provides a safe and supportive educational environment for students, allows academic staff to develop leadership.

Title: Development of an Anatomy Core Competency Framework: A Step towards Integrated Anatomy Teaching

Author: Syarifah Aisyah Syed Abd Halim, Mohamad Syabil Ikhwan Mohd Amin, Tg Fatimah Murniwati Tengku Muda

Institute: School of Medical Science, Health Campus, University Sains Malaysia, Kubang Kerian, Kelantan, Malaysia.

Abstract:

Aims: Competency-based education prepares medical graduates to practice medicine efficiently in line with local health needs. To achieve this aim, a comprehensive anatomy core competency framework—which is important for safe clinical practice was developed was developed for medical

undergraduates, to ensure that they acquire the required competencies in anatomy.

Methods: The framework was developed using a multimodal approach that explores elements of anatomy competency through a scoping review, analysis of standards referral documents, focus group discussion with the final-year medical students and semi-structured interviews with the junior doctors. The relevant competencies gathered from these methods were identified, mapped, and triangulated to produce a comprehensive anatomy core competency framework. The framework underwent a content validity evaluation by 12 content experts from anatomy, medicine-based, surgical-based, and lab-based disciplines, whose responses were used to calculate the content validity indices.

Results: The analysis identified five competence domains that form the core of the framework, namely anatomy knowledge comprehension, anatomy knowledge application, anatomy knowledge integration, anatomy knowledge translation and generic competency. The content validity assessment revealed that four items and two domains did not achieve a lower limit of acceptable value for item-level content validity index (I-CVI) and scale-level content validity index (S-CVI/Ave) respectively. To improve the I-CVI and S-CVI/Ave scores, the framework was revised according to the content experts' recommendation and the final revised version was proposed for integrated anatomy teaching.

Conclusion: Notwithstanding the impact of this framework on anatomy-integrated teaching, an instructional design strategy is required to enhance its efficacy.

Title: The Impact of Lifestyle Medicine Intervention on Patients with Chronic Diseases

Author: Shagufta Feroz

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Lifestyle interventions are proven to be effective in reducing chronic diseases severity, does disease reversal and improving patients' health outcome. This retrospective study aims to examine the impact of a lifestyle medicine intervention on patients with chronic diseases at a family medicine clinic.

Methods: The study sample consisted of patients mostly females having chronic diseases like obesity, polycystic ovarian disease, arthritis, diabetes mellitus and dyslipidemia. The intervention program included a personalized food prescription, exercise recommendations, stress management techniques and sleep regulation. The one-year study included 1200 patients, mostly females with an average age of 35 years. Participants underwent pre and post assessment including weight, BMI, abdominal girth, fasting blood sugar, lipid profile, sleep quality and quality of life.

Results: The results of the study showed that after the intervention, the participants mean BMI decreased from 31.3 to 29.8 kg/m², abdominal girth showed average 2 inches reduction, mean fasting blood sugar and lipids level showed significant improvement. The overall quality of life score improved significantly, with participants reporting better physical, emotional, and social wellbeing.

Conclusion: The findings of this study suggest that a lifestyle medicine intervention program can significantly improve health outcomes in chronic dis, therefore should be integrated in primary healthcare settings.

Title: From Understanding to Practicing Professionalism: Perspective of Final Year Medical Students at Rehman Medical College, Peshawar

Author: Iftikhar Qayum

Institute: Rehman Medical Institute, Peshawar, Pakistan

Abstract:

Aims: Professionalism is a key attribute of a practicing healthcare worker and must be given due importance in the training of medical students.

Methods: Materials & Methods: A descriptive study was conducted from March to April 2022 on final year MBBS students at a private medical college in Peshawar, Pakistan after approval from the Research Ethics Committee. The Penn State College of Medicine Professionalism Questionnaire was used to assess medical students' attitudes toward professionalism after obtaining permission from the Pennsylvania State University College of Medicine. Questionnaires were self-administered to students after informed consent and instructions. Scoring was done on the 5-point Likert scale of the PSCOM-PQ for the six sub-items of Professionalism. Data were analyzed for descriptive statistics by SPSS 26.

Results: The response rate was 86%, with 54 (62.79%) males and 32 (37.21%) females. Mean scores on the six items of Professionalism showed significant gender differences for Duty only (females 20.47±5.79; males 15.91±8.75; p=0.01). Items of Accountability and Altruism were given the most preference by students as attributes for Professionalism.

Conclusion: Understanding of Professionalism by senior medical students was satisfactory, with minimum gender differences in item scores.

Title: Developing Entrustable Professional Activities for Operative Dentistry House Job/Internship Program

Author: Talha M. Siddiqui

Institute: Baqai Dental College, Karachi, Pakistan

Abstract:

Aims: House Job program or Internship in our system is not structured and cause of this reason the graduates produced are not up to the mark. The term "Preparedness for Practice" should be the theme for the House Job program to produce better and competent dental graduates.

Methods: Mixed Method Study Nominal Group Technique Delphi Study Equal Rubric

Results: 10 EPAs were developed for Operative Dentistry House job Program

Conclusion: The House job program needs to be re structured on basis of Competency based Education along with EPAs as evidenced through literature are the most standardized source of assessment.

Title: Potentials and Pitfalls of ChatGPT in Medical Education: Perspectives of Medical Educationists

Author: Kinza Aslam

Institute: The University of Lahore, Lahore, Pakistan

Abstract:

Aims: AI has shown promising benefits for the education sector. Student engagement platforms, automated assessment systems and chatbots are just some examples of how the field of education is being revolutionized using AI. The objective of this study was to explore the perceptions of medical educationists regarding the use of ChatGPT.

Methods: A qualitative research design was used to explore the perceptions and experiences of educationists between February 2023 and April 2023. 15 educationists were interviewed using a semi structured format.

Results: Results showed that initial analysis of the transcripts led to the generation of 37 codes, which were ultimately reduced to 5 themes: Technology and Learning, ChatGPT in Education, Medical Education and Technology, Ethical Implications and Financial

Considerations in Academia.

Conclusion: This study highlights the benefits, drawbacks and ethical of using AI-based tools in education and the need to balance technology with human touch and critical thinking skills.

Title: Undergraduate Medical Students' Perspectives About the Educational Impact of the Objective Structured Clinical Examination

Author: Mahboobeh Khabaz Mafinejad

Institute: Tehran University of Medical Sciences, Tehran, Iran

Abstract:

Aims: Student assessment positively affects learning and the curriculum. The impact of assessment on students' learning can be examined in terms of their approach to learning, the depth of learning, and even their time. Therefore, the study was designed to investigate students' perspectives on the educational impact of OSCE.

Methods: A cross-sectional survey was conducted using a valid 21-item questionnaire. The questionnaire consisted of two parts, including demographic data, and influencing factors affecting students' attitudes towards the educational impact of the test using a 5-point Likert scale. A literature review and two focus group sessions were employed to generate survey items. Face validity of the questionnaire was conducted by nine medical students, and the content validity was examined by ten experts in the field of medical education, assessment, and clinical sciences. The reliability was calculated by Cronbach's alpha coefficient (0.91). The questionnaire was distributed among final-year medical students after OSCE.

Results: Overall, 102 responses were gathered, 48% of them from females. 68.1% of medical students mentioned that receiving written feedback from examiners at the end of each station helps them learn. 75.5% believed receiving

oral feedback from examiners while attending the OSCE stations helps them learn more. 60.2% of students admitted that reflection on their performance after the OSCE helps them. Only 44.9% of students considered receiving Simulated Patient (SP) feedback effective in their learning. Sixty-seven percent found the experience of being exposed to SP in the OSCE test to be more effective.

Conclusion: Receiving written and oral feedback from examiners helps students learn more from the test; the assessors can consider its form depending on the test's type and high stakes level.

Title: Walk a while in My Shoes: Operating Room (OR) Freshmen's Perception of Near-Peer Shadowing Program

Author: Mahboobeh Khabaz Mafinejad, Fatemeh Shahbazi, Azadeh Sayarifard, Larry Gruppen, Ahmadreza Dorri

Institute: Tehran University of Medical Sciences, Tehran, Iran

Abstract:

Aims: The key challenge for Operating Room (OR) students is to understand the relationship between preclinical and clinical stages. The near-peer shadowing program through linking lowerclassmen with upperclassmen connects the preclinical and clinical phases of the curriculum. This study aimed at studying the perceptions and experiences of OR freshmen in shadowing.

Methods: This study used a mixed method in the form of an embedded design. All students in the class were invited to participate. The statistical population included all first-year OR students in the undergraduate program of Nursing and Midwifery School of Zahedan and the Paramedical School of Zabol. In total, 50 OR freshmen entered this study. The program was evaluated quantitatively using a questionnaire and qualitatively through focus groups. Quantitative data were collected through a

researcher-made questionnaire to assess students' perceptions regarding the near-peer shadowing program. We used SPSS to compute descriptive statistics. Qualitative data were analyzed via conventional content analysis.

Results: The majority (58%) of students considered the shadowing program beneficial, 70% agreed that the program was effective in enhancing their academic motivation for deeper and more practical learning, and 78% believed that the program increased their knowledge regarding their future profession and enhanced their interest in it. The qualitative content analysis extracted three main categories: (i) learning with a shadowed: an opportunity to move beyond individual learning, (ii) situational learning: an opportunity to move beyond abstract learning, (iii) reflective learning: an opportunity to move beyond observation.

Conclusion: By familiarizing students with the OR profession through shadowing programs and early exposure to the OR environment, they gained more reasonable and comprehensive knowledge of their academic field.

Title: Identifying and prioritizing the factors for motivating medical students to engagement in educational activities

Author: Mahboobeh Khabaz Mafinejad, Reyhane Golbaf, Ahmadreza Dorri, Reza Hosseini Dolama

Institute: Tehran University of Medical Sciences, Tehran, Iran

Abstract:

Aims: It's not just a person's abilities that determine his function, but also his motivation and its related factors. A key element of engaging students in educational activities is identifying the influential factors that influence their motivation toward student engagement.

Methods: This study used a multi stage qualitative research approach. In the first stage, a focus group was held (N=10). The focus group session was audiotaped, transcribed, and analyzed using conventional content analysis. In the second stage, a two-round modified Delphi study was conducted to determine which of the factors met the a priori 4 inclusion threshold. The first round of Delphi was sent to students via email in the form of an open-ended questionnaire. In the second round of Delphi, the list of factors was again provided to the students to rate the importance of each factor on a 5-point Likert.

Results: In the first round of Delphi, 61 students participated. Of these, 40 were female (65%) and 21 were male (35%). 57 people (85% response rate) participated in the second round. Based on the extracted codes from the focus group meeting and the first round of Delphi, the factors were categorized into five areas: "Providing opportunities for obtaining personal and professional benefits", "Providing opportunities for encouragement and appreciation", "Providing opportunities for collaboration and receiving support", "Providing possibilities for personal and professional development" and "having a sense of interest, independence of action and usefulness of the activity" were divided.

Conclusion: Amongst the most important tasks of educational organizations is to involve students in different educational processes and to identify the effective factors in motivating them. +M80.

Title: Technology Enhanced Learning: A Way Forward for Teaching Gross Anatomy

Author: Shabana Ali, Tayyaba Qureshi

Institute: Islamic International Medical College, Islamabad, Pakistan

Abstract:

Aims: Utilizing multiple pedagogical resources is essential to enhance the learning and

retention of anatomy. Novel technological innovations offer an opportunity to teach standardized anatomy to medical students. The objective of the study was to compare the effectiveness of 3D Anatomy software with traditional teaching modalities such as 3D models and atlas.

Methods: The experimental study was conducted 1st year MBBS during MS module on 45 students. A topic of forearm was selected for an introductory lecture. After pre-test, students were divided into three groups to study (n=15), labelled as the Atlas group(A), 3D anatomy Model group(B), and the 3D Virtual Anatomy group(C) for self-directed intra-group learning. A post-intervention test, comprising multiple-choice questions and an "identification test" of gross features was conducted. The difference in test performance among the three groups in the pre-and post-intervention was calculated, and changes in the scores were assessed with the Kruskal-Wallis H test.

Results: The participants in all three groups had significantly higher scores on the post-intervention test than on the pre-intervention test. A comparison of pre-test scores between the groups did not show any significant difference. Intergroup comparison of post-test scores was statistically significant (<0.05). The Kruskal Walli's test showed a highly significant differences (<0.001) between the 3D Virtual Anatomy group and the Model group while a significant difference was also found between the 3D Virtual Anatomy group and the Atlas group. The difference between the Atlas group and 3D Model group was not significant.

Conclusion: Teaching Anatomy by using 3D Virtual modality is more effective in providing a better understanding and retention of the topic, in comparison with an atlas or 3D models.

Title: Assessing the Utility of ChatGPT as a Tool for Medical Educators at Rehman Medical College

Author: Mahrukh Shah

Institute: Rehman Medical College, Peshawar, Pakistan

Abstract:

Aims: Integration of artificial intelligence (AI) and large language models (LLMs) in education show potential in providing accessible and personalized learning experiences. However, there is scarcity of evidence regarding the effectiveness of ChatGPT, in medical education. This study shall evaluate the advantages of using ChatGPT by medical educators, in undergrad teaching.

Methods: The study has three phases. Phase 1: vulnerability testing of ChatGPT's generative capabilities, ensuring assessments, lesson plans and lesson content are consistent, accurate, and of good quality. Phase 2: intervention phase, where medical educators are recruited and their lessons assessed for quality by a panel of experts, student satisfaction through a questionnaire, and learning outcomes through pre- and post-trial assessments. Phase 3: training educators in the use of ChatGPT and its integration into their workflow. At the end, phase 2 would be repeated with ChatGPT integration. Results for both trials would then be compared to assess the utility of ChatGPT.

Results: Shall be presented at Conference.

Conclusion: Shall be presented at Conference.

Title: Connecting the Dots: Correlating Team-Based Learning and Medical Students' Perception of the Learning Environment

Author: Fahad Azam, Abida Shaheen

Institute: Shifa College of Medicine, STMU, Islamabad, Pakistan

Abstract:

Aims: Team-Based Learning (TBL) emphasizes active and collaborative learning and enhances

critical thinking and problem-solving skills among students. The effectiveness of collaborative learning is also influenced by the learning environment. The present study aimed to investigate the relationship between student's perceptions of learning environment and collaborative learning outcomes in TBL sessions.

Methods: The present study aimed to investigate the correlation between Dundee Ready Education Environment Measure (DREEM) questionnaire scores and Team-Based Learning scores in a medical school setting. A total of 45 medical students participated in a TBL session by completing an individual readiness assurance test (IRAT), a group readiness assurance test (GRAT), and a team application problem (TAPP). Following the TBL session, participants were asked to complete the DREEM questionnaire to complete it within a set timeframe.

Results: The results of the study did not show a significant correlation between DREEM and TBL scores. The correlation between the five subscales of DREEM (perception of learning, teachers, academic self-perception, atmosphere, and social self-perception) and TBL scores was not statistically significant.

Conclusion: Future studies should investigate the impact of TBL on medical students' perceptions of the learning environment before and after successive TBL sessions with a variety of learning materials.

Title: Gamified Formative Assessments: Effects on Test Anxiety and Motivation in a Mixed-Methods Study

Author: Fahad Azam, Abida Shaheen

Institute: Shifa College of Medicine, STMU, Islamabad, Pakistan

Abstract:

Aims: High-stakes assessments may often lead to test anxiety negatively impacting students' learning outcomes. Gamification has emerged

as an innovative approach to enhance student engagement and motivation in learning activities. This mixed-method sequential explanatory study investigated the impact of gamification on students' test anxiety scores in formative assessments.

Methods: In the quantitative phase, a total of 251 students participated and were randomly assigned to four groups. Two groups took a formative assessment using Google Forms, while the other two groups took the same formative assessment using the gamified app, Quizziz. Test anxiety was measured using the Patrick-Henry-Community-College (PHCC) questionnaire. In the qualitative phase, targeted interviews were conducted with a selected group of students to explore their perceptions of gamification in relation to motivation and anxiety.

Results: Students who took the formative assessment using the Quizziz reported significantly lower levels of test anxiety than those who took the assessment using Google Forms. The qualitative data collected from the students supported the quantitative findings. The students who took the assessment using Quizzes reported more motivation and engagement in the learning process and appreciated instant feedback and the leaderboard which helped them identify their strengths and weaknesses and motivated them to improve their performance.

Conclusion: Incorporating gamification elements in educational settings can create a more interactive learning experience in formative assessments thereby creating a positive impact on students' test anxiety and motivation.

Title: Workshop on Construction of Case Cluster MCQs; What, Why and How, Reaction of Faculty

Author: Tahira Sadiq

Institute: Riphah International University,

Islamabad, Pakistan

Abstract:

Aims: There is a great need to develop faculty on construction of complex assessment items like case cluster MCQs, which are considered best for assessing PBLs. To align assessment strategies with teaching strategies, a workshop was arranged to develop faculty on new skill, how to develop case cluster MCQs.

Methods: A quantitative program evaluation study was carried out on 75 faculty members of basic and preclinical sciences of a medical college. four-hour workshop was conducted three times, counting 25 participants each time. After the workshop participant's reaction was measured through self-reported post workshop satisfaction questionnaire on 5-point Likert scale. along with descriptive statistics and percentages, person correlation coefficient was used to analyze the data.

Results: Satisfaction of participants after the workshop was 93.3 % on a 5-point Likert scale. Among all the participants 35.7 % agree and 64.3 % strongly agree that workshop enhanced their learning about case cluster MCQs. not a single participant disagrees. this shows a positive attitude of participants towards the workshop.

Conclusion: It is remarkable that a positive change in the attitude of faculty members in term of the importance of CCMCQs for assessing PBLs took place.

Title: A Comparison of the Blueprints Developed by Medical Students and Faculty Members in an Integrated Module

Author: Fahad Azam, Abida Shaheen

Institute: Shifa College of Medicine, STMU, Islamabad, Pakistan

Abstract:

Aims: Alignment between objectives, instructional strategies and assessments is very important for effective curriculum delivery. Any discrepancy in the understanding

of the importance of topics might affect the academic performance of students in summative assessment. This study aimed to compare a blueprint developed by students with the blueprint developed by faculty.

Methods: The year III medical students were asked to develop a blueprint using the Calgary method at the end of an integrated module. This blueprint was compared with the blueprint developed by the faculty members who were actively involved in teaching in the module. Sixty students and thirteen teachers participated in this research. Students and faculty were both asked to rate each theme of the module for impact and frequency. The impact factor and weighting of each theme was calculated and compared. Appropriate statistical tests were used to analyze the results.

Results: Out of the thirteen themes, the impact factor, and the number of questions of only two themes were statistically different (p -value= 0.01 and 0.009, respectively). The impact factor and the number of questions developed by the faculty members and students were similar in 11 themes (p -value \leq 0.05).

Conclusion: Alignment of the content and assessments may improve the learning environment and performance of medical students. It is important to ensure that assessments reflect the content that has been delivered.

Title: "Ward Round Practices" of Clinicians for Effective Teaching and Learning of Undergraduate Medical Students: A Systematic Review

Author: Shamaila Burney

Institute: IIMC-T, Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Ward rounds remain a useful yet under-utilized opportunity for undergraduate

teaching/learning. Objectives: 1. To explore the factors that influence teaching and learning of undergraduate medical students on ward rounds. 2. To identify the best practices & strategies that improve teaching and learning on ward rounds.

Methods: A systematic literature review was conducted following PRISMA 2020 protocols. Medline, JStor, Science Direct & Google Scholar were searched using search terms "ward round", "practices", "clinicians", "teaching" and "undergraduate medical students". Review period was 25 years. Articles published in peer-reviewed journals & focused on educational outcomes of modern ward rounds were included. Discipline specific articles (pharmacy, nursing, dental), patient safety and quality studies were excluded. Articles published in languages other than English were also excluded.

Results: A total of 342 records were identified from 4 data bases. Records were screened by title and abstract and duplicates removed. Of the 26 records retrieved, 21 were included for thematic analysis after meeting inclusion/exclusion criteria. Only studies with Quallsyst percentage > 70% were selected for critical appraisal. Key findings led to item generation and emergent themes. We focused on domains that were more learner-centered and focused on undergraduate level. A thorough literature search thus yielded 25 items under 6 constructs that were most valuable for undergraduate teaching.

Conclusion: The literature review provided us with core knowledge for educationally successful ward rounds. There is a need to understand what strategies can improve teaching and learning of medical students on ward rounds.

Title: Teamwork and Self-Determination: Uncovering the Synergy in Learning

Author: Abida Shaheen, Fahad Aazam

Institute: Shifa College of Medicine, STMU, Islamabad, Pakistan.

Abstract:

Aims: Self-determination theory (SDT) addresses the basic psychological needs of competence, autonomy, and relatedness, while team-based learning is a popular instructional strategy that emphasizes collaboration, problem-solving and active participation. The present study aimed to explore the impact of TBL on the motivational dimension of learning of the medical student.

Methods: A total of 45 participants of year-3 were enrolled in the study after informed consent. The association of different phases of TBL (IRAT, GRAT, T-APP) with the perceived competence, autonomy, relatedness, and motivation of the learners was investigated. The questionnaires on motivational dimension of learning were filled out by the students at the end of the TBL session with special reference to the new teaching format of team-based learning.

Results: Analysis of the data did not reveal any significant correlation between scores of motivation with different phases of TBL. The correlation between the basic psychological needs (autonomy, competence, relatedness, and motivation scores was also examined. Perceived autonomy was positively correlated with basic psychological need satisfaction and perceived competence of the learners ($p < 0.001$).

Conclusion: Students' self-determination and motivation are critical variables in collaborative learning settings. The exploration of motivational domain of learning should be given due importance in designing effective pedagogical approaches.

Title: Correlation of Academic Procrastination with Burnout in Medical Students

Author: Abida Shaheen, Fahad Azam

Institute: Shifa College of Medicine, STMU,

Islamabad, Pakistan

Abstract:

Aims: The prevalence of burnout and academic procrastination has been increasing in medical students, affecting their learning and academic performance. There may be a possibility that these two variables influence each other. The present study aimed to investigate the correlation of academic procrastination with different domains of burnout in medical students.

Methods: Sixty-five medical students of year 3 gave consent to participate in the study. The students were asked to fill out the BCSQ-12 questionnaire to assess the level of the three domains of burnout. Academic procrastination was assessed using the PASS scale which assesses procrastination behavior in six domains. Pearson Correlation test was applied to find out the correlation between procrastination scores and scores of burnout and its three domains.

Results: Twenty-eight male and thirty-seven female students participated in the study. The mean burnout score on the BCSQ-12 questionnaire for all participants was 45.85 ± 8.42 . The mean procrastination score using the PASS questionnaire was 35.45 ± 7.41 . Academic procrastination score had significant positive correlation with overall burnout score ($r = 0.369$, $p = 0.002$), lack of development domain ($r = 0.371$, $p = 0.002$) and neglect domain of burnout ($r = 0.312$, $p = 0.011$). Gender-wise analysis showed significant positive correlation of procrastination with overall burnout score ($r = 0.559$, $p = 0.002$) and neglect domain ($r = 0.557$, $p = 0.002$) in male students. A positive correlation of procrastination with lack of development domain of burnout was observed in females ($r = 0.452$, $p = 0.005$).

Conclusion: Identifying the prevalence of student burnout and academic procrastination might help learners gain insight into their

behavior and perform better in the academic setting and building a supportive learning environment.

Title: Effect of Online Proctoring on Test Anxiety and Academic Performance of Medical Students

Author: Abida Shaheen, Fahad Azam

Institute: Shifa College of Medicine, STMU, Islamabad, Pakistan

Aims: Since the COVID-19 pandemic, online video proctoring tools are being utilized by many institutions to minimize the use of unfair means that may further contribute to test anxiety. Our study aimed to measure and compare test anxiety in medical students with and without video proctoring during online assessments.

Methods: An online time-bound formative assessment with forty MCQs was assigned to year III students in an integrated module. Students were randomly divided into two groups; one group was monitored by faculty members using online video proctoring tools while the other group was not proctored. A validated questionnaire (Nist and Diehl) was used to measure test anxiety in both groups. Anxiety scores of both groups were compared with appropriate statistical tests.

Results: The mean anxiety score of thirty-two students with proctoring (26.31 ± 8.83) was statically like thirty-five students in the group which was not proctored (27.91 ± 8.94 ; $p=0.464$). The mean assessment scores of students with and without proctoring were 43.36 ± 17.55 and 43.57 ± 18.14 , respectively and did not show a significant difference ($p=0.961$). The mean anxiety score in female students with proctoring was significantly higher than scores of male students with proctoring [29.77 ± 7.746 vs 18.70 ± 5.90 ($p < 0.001$)].

Conclusion: Sensitization to online testing tools with proctoring in the formative

assessments could help the students with high trait anxiety to perform better in the high-stakes examination.

Title: From Theory to Practice: Applying Self-Determination Theory to Create Optimal Learning Environments

Author: Abida Shaheen, Fahad Azam

Institute: Shifa College of Medicine, STMU, Islamabad, Pakistan

Abstract:

Aims: The relationship between the motivational domain of learning explained by Self-Determination Theory (SDT) and the educational environment has not been fully explored in the context of medical education. Therefore, this study aims to examine the correlation between SDT questionnaire scores and DREEM learning environment scores in medical students.

Methods: A total of 45 participants of year-3 were enrolled in the study after taking informed consent. The association of perceived competence, autonomy, relatedness, motivation of the learners and learning environment was investigated by the validated questionnaires. The correlation between SDT domains and the subscales of DREEM (perception of learning, teachers, academic self-perception, atmosphere, and social self-perception) were also examined.

Results: A total of 45 participants of year-3 were enrolled in the study after taking informed consent. The association of perceived competence, autonomy, relatedness, motivation of the learners and learning environment was investigated by the validated questionnaires. The correlation between SDT domains and the subscales of DREEM (perception of learning, teachers, academic self-perception, atmosphere, and social self-perception) were also examined. The results of the study showed a significant positive correlation between SDT scores and

DREEM scores ($p < 0.001$), indicating that students who had a higher sense of autonomy, competence, and relatedness were more likely to perceive their learning environment as positive and conducive to their learning. Perceived autonomy, competence and relatedness were positively correlated with all DREEM subscales. Furthermore, the motivation of the learners showed a strong correlation with the academic self-perception of the learners.

Conclusion:

Creating a positive and supportive learning environment is crucial for good quality medical education. Medical educators should strive to create effective and supportive learning environments by satisfying basic psychological needs.

Title: Early-Birds and Just-In-Timers: Effect of Joining Early and Time Spent in Class on Academic Performance of Learners

Author: Fahad Azam, Abida Shaheen

Institute: Shifa College of Medicine, STMU, Islamabad, Pakistan

Abstract:

Aims: Keeping track of joining the teaching sessions and time spent in teaching sessions is quite burdensome in the conventional classroom setting. We aimed to explore the effects of early or late entry and the duration spent in online sessions by medical students on their performance in summative assessments.

Methods: Eighteen online teaching sessions were conducted on Zoom in a 5-weeks blended integrated module of year-III. The number of minutes for early or late entry of each student and the mean duration of time spent in sessions was computed using the report generated by Zoom. The correlation between joining time, duration spent in teaching sessions and summative scores were calculated using Pearson correlation.

Results: Mean time of joining the online class

was 1.87 ± 4.79 minutes and the mean duration of time spent in class was 55.32 ± 7.77 minutes. Entering the class late had an inverse significant correlation with logbook marks, overall attendance and average time spent in class ($r = -0.30$, $p < 0.001$), ($r = -0.39$, $p < 0.001$), ($r = -0.73$, $p < 0.001$), respectively. Mean duration of time spent in the online classroom had a significant positive correlation with logbook marks ($r = 0.360$, $p < 0.001$), overall attendance ($r = 0.329$, $p = 0.001$) and a negative significant correlation with early entry in online teaching sessions, ($r = -0.738$, $p < 0.001$). Average duration spent in online teaching sessions did not have a significant correlation with scores in MCQs ($r = 0.115$, $p = 0.256$) and SAQs ($r = 0.138$, $p = 0.172$).

Conclusion: The results of this study provide valuable insights for educators and institutions in designing effective blended learning programs and a comprehensive approach to summative assessments for medical students.

Title: Does Status of The Participants Matter while Seeking Consensus in a Delphi Study? A Detailed Analysis

Author: Ambreen Ansar, Rahila Yasmeen, Robina Mushtaq, Asad Elahi

Institute: Wah Medical College, Pakistan

Abstract:

Aims: The overall goal was to contribute to the understanding of interventions aimed at enhancing the mental health of students during the clerkship years. Objective was to assess the feasibility of a support group in this study population and identify salient themes emerging during the sessions to devise targeted strategies for future interventions.

Methods: After IRB approval, an invitation was sent to all clerkship students. Volunteered Students met regularly on Zoom with a trained physician (psychiatrist) experienced in running focus groups. The facilitator encouraged

participants to share significant experiences and facilitated the discussions and feedback. Students were informed to take notes and self-reflect after each session. Quantitative data were collected using validated tools such as PHQ 9, the 3-item Basic Sense of Coherence Questionnaire, and the Single Measure of Burnout. The sessions were recorded and transcribed for analysis.

Results: Quantitative Data: The results of the PHQ9 showed that most students expressed symptoms of burnout but not depression; most felt bothered by little interest in life or pleasure in doing things and having problems with sleep; however, they did not feel down, depressed, or hopeless. When asked directly if they experienced burnout, most said they felt the stress but denied burnout, except for one student: "I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion." Qualitative Data: Thematic analysis revealed themes around self-discipline, career identity, and self-care.

Conclusion: The themes that emerged were like those described in the relevant literature. The results may suggest Interventions designed to decrease or prevent burnout in multicultural settings like that of our school.

Title: Exploring the Experiences of MBBS Students with Computer-Based Examinations in a Private Medical College: Perks, Challenges

Author: Saima Rafique, Kainat Javed

Institute: University of Lahore, Lahore, Pakistan

Abstract:

Aims: To compare the surgery scores of undergraduate medical students taught by the concept-maps and interactive lectures. Concept-maps are used as a tool to acquire new information, comprehend prior knowledge with better knowledge retention. In surgical education limited work has been

done internationally with no published data nationally.

Methods: After randomization by software (random allocation software version 1.0), all the volunteer fourth year medical students were divided into two groups. A session on teaching concept map construction was conducted with control group A after the intervention and experiment group B before the intervention. Three teaching sessions of one hour were done to control group (A) by interactive lecture using interactive methods in experiment group (B) with concept map. Post class test (one best type) was taken from both the groups after the class and scores of the two groups were compared for immediate effects on knowledge / short term knowledge.

Results: Our study reported a mean test score of 19.5 (2.75 +- 0.49) for the control group A while 21.1 (3.49 +- 0.65) for experimental group B. Our study reported a negative t value of 2.003 with a significant p-value of 0.05 that means that the test scores of the control group A were lower than the scores of experimental group B.

Conclusion: The present study showed that using concept maps is an effective and promising way to give learners better understanding of complex concepts in short amounts of time.

Title: Interpersonal Communication Competencies among Graduating Physical Therapy Students

Author: Hadiqa Adnan, Humaira Khan

Institute: Islamabad Medical and Dental College, Islamabad, Pakistan

Abstract:

Aims: To evaluate the effectiveness of preoperative analgesics on inferior alveolar nerve blocks during root canal treatment in patients with symptomatic irreversible pulpitis of the mandibular molars.

Methods: A total of 120 patients with symptomatic irreversible pulpitis were

randomly divided into one of the four groups: group A (control, vitamin E, Evion 400 mg), group B (diclofenac sodium, Voltral SR100 100 mg), group C (piroxicam, Feldene 20 mg), and group D (tramadol, Tramal 50 mg). The patients recorded preoperative and intraoperative pain levels using Heft-Parker visual analog scale before and after the oral administration of the analgesics respectively.

Results: All the analgesic groups showed a significant effect on the efficacy of the inferior alveolar nerve block in contrast to the control group ($P < 0.05$). Clinically, the piroxicam group displayed superior effectiveness on the inferior alveolar nerve block during endodontic procedures, followed by tramadol and diclofenac sodium groups.

Conclusion: Piroxicam showed superior therapeutic effectiveness for inferior alveolar nerve block and reportedly display lesser adverse effects in contrast to the other analgesics used in this study. Hence, piroxicam should be considered as a preoperative analgesic drug of choice to increase the effectiveness of inferior alveolar nerve block in patients with symptomatic irreversible pulpitis on the mandibular molars.

Title: Preparedness to Begin the Clinical Phase of Studying at Public and Private Medical Schools in Indonesia

Author: Wienta Diarsvitri

Institute: Faculty of Medicine, Hang Tuah University, Indonesia

Abstract:

Aims: Communication is the most basic and crucial notion in all aspects of life and professions. The most critical foundation of professional competency is effective communication abilities. Clinical knowledge and the development of interpersonal skills are inextricably linked. Good communication in the caregiver-patient relationship solves a lot of difficulties and ensures quality.

Methods: Communication is the most basic and crucial notion in all aspects of life and professions. The most critical foundation of professional competency is effective communication abilities. Clinical knowledge and the development of interpersonal skills are inextricably linked. Good communication in the caregiver-patient relationship solves a lot of difficulties and ensures quality. An analytical cross-sectional study of sample size 208 was conducted using Non-probability universal sampling technique. A valid and pretested questionnaire of The Interpersonal Communication Skill Inventory (Learning Dynamics, 2002) was used for the physiotherapist's self-assessment of communication skills along with demographic measurements.

Results: The results indicated that the (208) graduating physical therapy students assessed their interpersonal communication skills as average. However, most of the students need improvement and much development in their communication skills competencies.

Conclusion: The study concluded that students possess average communication skills with some strengths and weaknesses in different areas of communication. The results highlight the need for comprehensive assessment and addition.

Title: Evaluation of SOOCA Test in the Community Medicine Block at the Faculty of Medicine, Hang Tuah University

Author: Wienta Diarsvitri

Institute: Faculty of Medicine, Hang Tuah University, Indonesia

Abstract:

Aims: Medical students need to be well-prepared to begin the clinical phase of studying, as this may have positive impacts on clinical learning and patient safety. This study aims to compare medical students' preparedness to begin the clinical phase of

studying at public and private medical schools in Indonesia.

Methods: A cross-sectional design with mixed methods research: the adaptation of a 39-item medical student competency survey that has been validated and focus group discussion. Participants for the survey were 48 clinical faculties and for the FGDs, there were 23 clinical faculties with different areas of specialization from public and private medical schools with a minimum of three years of experience in supervising clinical students before and during the COVID-19 pandemic. The quantitative data were analyzed using Mann-Whitney U and Kruskal-Wallis tests. The qualitative data were analyzed using verbal analysis, a methodology for quantifying the subjective qualitative coding of verbal expressions.

Results: The survey instrument in the Indonesian language was valid and reliable. Clinical faculties from public medical schools typically gave higher rate scores in student competencies than those from private medical schools. In public medical schools, the highest to the lowest rating of student competencies was given by clinical faculties in primary care, clinical faculties in the non-surgery area of specialization, and clinical faculties in the surgery area of specialization. The focus group discussion identified four factors that influenced medical students' preparedness: a good clinical education system, qualified clinical faculties, qualified medical students, and a good support system.

Conclusion: This study provides evidence that could be beneficial in designing evaluations, developmental projects in medical education, or carrying out other studies with larger sample sizes on similar topics.

Title: Perception of Flipped Classroom from Medical and Dental Faculty of BUMDC

Author: Madiha Ata, Shafaq Sultana

Institute: The Indus Hospital & Health Network, Karachi, Pakistan

Aims: This study aims at exploring the faculty's understanding and perceptions regarding flipping the classroom.

Methods: A Cross-sectional Descriptive study was carried out at Bahria university medical and dental college (BUMDC), Karachi, Pakistan from January to June 2020, after approval from the institutional ethical review committee. Data was collected through a self-designed questionnaire after obtaining verbal consent from 197 faculty members through non-probability purposive sampling. Data was analyzed by version 23.0 of Statistical Package for Social Sciences (SPSS).

Results: The results revealed that more than half of the studied participants had a moderate perception regarding Flipped Classroom and more than one-third of those who were female, had a highly positive perception. According to designation and teaching experience, mean scores were higher for senior faculty as compared to junior faculty ($p=0.02$).

Conclusion: Contrary to popular belief, senior faculty also perceives this new technique as being beneficial for their teaching. This opportunity should be utilized to train the faculty in conducting flipped classrooms.

Title: Effects of Mental Health on Adolescents Due to Denied Social Interaction

Author: Fatema Singaporewala, Grisilda Vidya Berhardt, Pooja Shivappa

Institute: Ras Al Khaimah Medical and Health Sciences University, United Arab Emirates

Abstract:

Aims: Aim of the study is to assess the effects of DSI on anxiety, depression, stress and daily lives of adolescents.

Methods: A quantitative retrospective Cross-Sectional survey employing convenience sampling where Online self-administered

questionnaires were distributed to UAE high school students. Sample size was calculated using inclusion and exclusion criteria by applying a margin of error of 5%, confidence interval of 95% the recommended sample size is 110 cases. The questionnaire used in the study was GAD-2, PHQ-7, PSS-10. Data was analyzed using SPSS Software and summarized using descriptive statistics. Pearson's correlation coefficient was used to find cumulative scores of different parameters. The p value <0.05 was considered significant. Study was approved by MOHAP: 14-2023-UG-M.

Results: The prevalence rate of anxiety was 34% and depressive symptoms was 27%. For several days, 49.1% of adolescents felt down & hopeless and 47.2% had trouble falling asleep. The prevalence of stress levels was observed in 19.1% of adolescents. Effects of DSI, 51.9% of adolescents were somewhat unable to see their friends and 49.1% agreed that it affected their education. Instagram (37.7%) was the main used media for information on any communicable diseases. 72.6% believe that unaccounted information online can cause fear and panic. 63.2% agreed that filters must be set up on platforms to avoid such reactions.

Conclusion: DSI has negatively impacted adolescent mental health. Social interaction enhances good health to influence positive emotions and physical wellbeing. Further studies are needed to determine long term effects of pandemic.

Title: Promising Score for Teaching and Learning Environment: An Experience of a Fledgling Medical College in Saudi Arabia

Author: Mohammed Almansour, Mohammed Almansour

Institute: King Saud University, Saudi Arabia

Abstract:

Aims: Background: Professional competency of graduates of an institute reflects its teaching

and learning environment (TLE). This study aimed to provide a preliminary assessment of the TLE at the College of Medicine at Majmaah University.

Methods: Methods: A cross-sectional survey was conducted during 2020 among students at the College. A validated scoring tool "the Experience of Teaching and Learning Questionnaire" was used. The mean score of each section and statement, the difference between the means of different demographic groups, and correlations between sections were analyzed. Sections were analyzed.

Results: Results: A total of 234 (72.2%) enrolled students participated in this survey with a ratio of male-to-female and basic-to-clinical years of 2:1 and 1:1 respectively. Most participants reported a GPA above 3/5. The overall mean score was 3.52/5 points. Section one has the highest score (3.68) and no section scored a mean below three. however, section three "demands made by the course" scored a borderline mean of 3.08. Students in clinical years have a significantly higher overall mean score compared to their counterparts (3.66 vs 3.39, $p < 0.001$).

Conclusion: Conclusions: Students generally perceived the TLE positively. An atmosphere that allows students to bear the demands required for acquiring knowledge and subject-based skills.

Title: Special Pathology in the Course Content of Third Year MBBS: Views of Students and Teachers

Author: Wafa Omer

Institute: Rawalpindi Medical University, Rawalpindi, Pakistan

Aims: The students and teachers are major stake holders whenever there is a change in the curriculum. Objective of the study was to assess the views of third year MBBS students and college teachers involved in teaching third year MBBS class regarding the inclusion of

special pathology to the already cumbersome course.

Methods: It was a cross sectional descriptive study carried out over a period of eight months. An online questionnaire was used to collect the data from 110 third year MBBS students and 35 medical college teachers involved in teaching the 3rd year MBBS class at HBS Medical and Dental college, Islamabad, Pakistan. the questionnaire contained open ended questions along with a short questionnaire based on 3-point likert scale for a semi-quantitative analysis. The open-ended responses the interviews were assessed using the Mayring's qualitative context analysis. The similar responses were bundled up as the comments were sequentially processed and the replicates grouped.

Results: A total of 105 medical students and 32 medical teachers participated in the study. n=94 (89.5%) of the students agreed that the content taught was incoherent and n=92(88%) agreed that the time allocation for the various modules was inappropriate. The important reservation of the students was that the assessment strategies of the past continued to prevail and they were not aligned with the change in curriculum. they suggested to spread pathology over 4 years of MBBS so that true integration can be done. As far as the teachers are concerned n=28(88%) agreed that course content is inappropriate selective knowledge imparted.

Conclusion: Although curriculum change is a dynamic process and leads to refinement of the existing content, but it should be implemented after proper planning, training, and validation.

Title: Knowledge and Attitude of Medical Students and Young Medical College Teachers towards Genetic Risk testing for PCAD

Author: Omer Jamshed Khan

Institute: AFIRM, Rawalpindi, Pakistan

Abstract:

Aims: The study was to assess the knowledge and attitude of medical students and young medical college teachers regarding genetic risk testing for Premature Coronary Artery Disease.

Methods: It was a cross sectional descriptive study conducted at AJK Medical college and CMH Muzaffarabad. Self-completion online questionnaire was sent to collect data for 298 medical students and 70 young medical college teachers with questions related to the knowledge and attitude towards genetic risk testing along with their views regarding direct-to-consumer genetic tests for PCAD versus genetic tests involving cardiologist opinion. Responses were assessed through MCQs & were then ranked by the number of times they were selected. Dichotomous yes/no questions were used to assess attitude towards testing after consultation with the cardiologist vs direct to consumer.

Results: A total of 250 medical students and 62 young medical teachers <45 years participated in the study. 38% of the students were aware of genetic risk testing while 66% of medical teachers had prior knowledge. 89.5% of the students and 56% of medical students were interested in undergoing genetic risk testing for PCAD after they had been explained. Main reason for students & teachers complying was curiosity to know their risk score while the main reason for being unwilling was cost of the test for the students and doubt regarding the efficacy & reliability of the results for the teachers.

Conclusion: Although the level of awareness about genetic testing is relatively good in young medical college teachers but they were reluctant to advise it or undergo it, therefore, interventions are necessary.

Title: Inculcation of Professionalism in House Officers through Mentoring: A Pilot Project in Gynecology Obstetrics

Author: Iram Sarwar

Institute: Ayub Teaching Hospital, Abbottabad, Pakistan

Abstract:

Aims: Mentoring has been recognized as an important method in medical teaching that improves educational and professional growth. Objective was to evaluate the effectiveness of mentoring of House Officers by senior residents on their transition towards their professional life and improving their learning through standardized training and assessment during Gynae/Obstetrics rotation.

Methods: A mentorship program was initiated as a one-month pilot project to train the house officers of Obstetrics /Gynecology through standardized curriculum and inculcate professional values and practices relevant to the discipline. Mentors and mentees were briefed through orientation session about the program and their roles and responsibilities. Thereafter, a mixed method study was conducted to evaluate the program, having qualitative semi structured interviews from mentors and mentees at the end of program as well as quantitative formative assessments in the form of work-based assessments and ward presentations, and summative assessment in the form of logbook and Multiple choice.

Results: House officers appreciated the program as it helped them in acquiring knowledge and skills in systematic way. program helped them in overcoming workplace difficulties, as well as stress and anxiety. They suggested formal training of mentors to improve program. formative assessment was satisfactory with pertinent feedback by mentors. all house officers passed summative assessment through MCQS with a mean score of 88%. logbook entries were not found to be satisfactory. Mentors said that the

program helped them to improve their leadership and communication skills.

Conclusion: Mentoring had a positive effect on house officers learning and overall satisfaction despite some challenges and limitations. we recommend that house officers' curriculum should be designed and implemented.

Title: Development and Validation of a Board Game (Ethical Monopoly) for Teaching Bioethics to Undergraduate Medical Students in Pakistan

Author: Abeera Fatima, Usman Mehboob, Rehan Ahmed Khan

Institute: Al-Aleem Medical College, Lahore, Pakistan

Abstract:

Aims: Inadequate Bioethical teaching in Pakistan has resulted in abundant media reports of misconduct and complaints of unethical behaviors lodged against medical professionals. This study was aimed at developing an innovative board game for Bioethical teaching and analyzing the effects of this board game on student satisfaction, engagement, and knowledge gain.

Methods: 'Ethical Monopoly' was developed and validated using a mixed methods study design, following AMEE Guide 87. The study was conducted at University of Lahore and Al-Aleem Medical College. The game content, design and mechanics were after literature review and four focus group discussions with 16 undergraduate medical students and 11 faculty members. Situational Judgment tests were designed containing ethical dilemmas. 16 multi-disciplinary Expert Judges evaluated the content validity of Ethical Monopoly in a single round of Delphi technique. The response process validity of the game was measured using observation and cognitive interviews with a group of 8 undergraduate medical students.

Results: Ethical Monopoly game was validated using a data collection instrument, comprising 55 Items regarding Game Rules (15 Items), Game Design (4 Items), Game Cards (12 Items), Game Relevance and Satisfaction (24 Items). The content validity index, Scale-Level Content Validity Index Average (S-CVI/Ave) for board game was calculated as 0.93. Qualitative analysis of cognitive interviews showed excellent response process validity. Students appreciated the user-friendly and colorful game design, and use of diverse and realistic scenarios in Situational Judgment tests.

Conclusion: Ethical Monopoly was perceived as a valid board game, with relevant learning objectives, attractive design and game mechanics that are suitable for improving student motivation and interaction in Bioethical learning.

Title: Is Old Really Gold? A Qualitative Perspective of Teachers Seniority on Undergraduate Clinical Learning in Pakistan

Author: Saima Rafique, Khadijah Mukhtar, Mahwish Arooj

Institute: University of Lahore, Lahore, Pakistan

Abstract:

Aims: During Clerkship years, students interact with a diverse clinical team, ranging from senior Professorial staff to post-graduate residents. This disparateness in teaching experiences provides an exceptionally challenging learning environment., This study was aimed at evaluating students' perception regarding the seniority of teaching faculty and its impact on their learning.

Methods: This study was conducted with Final Year undergraduate medical students at the University College of Medicine, The University of Lahore. We used purposive sampling and invited 3 members from each Clerkship batch, including their batch representative, high and low achievers of recent ward tests. Three focus

group discussions were conducted to evaluate students' perception of their learning experience with senior and junior faculty members, and their suggestions about who should be involved in Clerkship. The data was transcribed, and thematic analysis was performed. To ensure reliability, we used member checking, and coding was performed by two independent researchers.

Results: A total of 22 students participated in our study. The traits of senior faculty were reported as "knowledgeable", "better clinical acumen", "difficult to comprehend", "overburdened" with administrative work, and exhibited "confirmation bias" in assessment. Junior faculty were reported to be "joyous", "student-friendly", ensured the "provision of examination-oriented knowledge", and had better "skill demonstration". Students perceived junior faculty to have "poor leadership" and "inadequate managerial role" resulting in poor classroom control and at times "wrongly pitched teaching".

Conclusion: Students perceived better learning with junior faculty members especially for Clinical methods, however, they perceived that interaction with senior faculty is helpful in familiarization with high-stake assessment.

Title: Learning on Manikins

Author: Maimoona Nasreen, Tayyaba Azhar

Institute: FMH College of Medicine & Dentistry, Lahore, Pakistan & University College of Medicine & Dentistry, Lahore, Pakistan

Abstract:

Aims: In medical schools' acquisition of clinical skills is essential to bridge the theory practice gap. Practicing the mastery of clinical skills on real patients threatens patient safety and at the same time raises ethical concerns. To address this medical colleges have developed skill labs to provide an opportunity to the

students to practice clinical skills.

Methods: A cross-sectional study was conducted at UCMD. House job residents who had recently graduated were included in the study since they were trained in the skills lab during their 4th and final year. Data was collected through goggle forms. Data was analyzed using SPSS.

Results: Out of 150 students 138 responded. 83 % & 84.6% of the students agreed that training increased their motivation for becoming a doctor and learning clinical subjects respectively. 84% of the students reported that they were not under any pressure while learning on manikins. 84% said that in a skill lab training they were not afraid that they would hurt the patient . 79% of the students reported that the skills learned on a manikin can be directly transferred to patients. Students also reported that skill lab training laboratory training has increased my confidence.

Conclusion: Students perceived that the clinical skill lab provided a "fear free" environment to develop, learn and practice their clinical skills before approaching the patients in real life.

Title: Team-Based Learning as A Low-Stakes Assessment has a Positive Correlation with High-Stakes Assessment Engaging Programmatic Assessment Design.

Author: Abdul Ahad Shaikh, Abdul Jabar Rasool, Muhammad Raihan Sajid, Muhammad Faisal Ikram, Abdul Samad Shaikh

Institute: College of Medicine, Alfaisal University, Riyadh, Saudi Arabia

Abstract:

Aims: Alfaisal University was established in 2008 and the College of Medicine at Alfaisal University is the first in the Gulf region to implement team-based learning (TBL) as one of its teaching-learning strategies with state-of-the-art facilities since 2013. We aim to

investigate the correlation between TBL as a low stakes assessment.

Methods: TBL is being used as a teaching-learning modality in the first year at the College of Medicine. TBL was utilized as a low-stakes test for students taking all first year MBBS courses in the academic year 2022-2023. In year one, we offer the following modules/blocks: Foundation, Musculoskeletal System, Gastrointestinal System, Biochemistry & Cell Biology-1, Cardiopulmonary, Hematopoietic & Lymphatic System, Renal System, and Biochemistry & Cell Biology-2. We compared the results of the average individual readiness assurance test (iRAT) scores with the average summative assessment scores of the same cohort of students for all the first-year blocks/modules.

Results: Data was collected for the eight modules mentioned, and the average iRAT score percentage of students passing the module on the MCQ exam and final exam. There is a correlation of 0.94 between the percentage of students passing the MCQ and the Final exam score, since the MCQ constitutes 60% of the final grade this result is expected. Although TBL is a continuous assessment task in each block it correlated moderately with the MCQ [0.56] and exam [0.53] respectively. These results are supportive and are significantly predictive of student performance.

Conclusion: This research shows that TBL as a low-stakes assessment has a positive correlation with high-stakes assessments, such as final exams following programmatic assessment design.

Title: Challenges Faced by Female Doctors During Fellowship Training Hindering their Professional Progress in A Conservative Cultural Context

Author: Komel Zulfiqar

Institute: AL Nafees Medical College ,

Islamabad, Pakistan

Abstract:

Aims: More female occupies seats in medical schools on merit but very few take up medical profession as career because of problems from countless ways. This leads to lack of retention of female doctors in their profession. Aim of study is to explore the nature of challenges faced by female doctors.

Methods: This study was conducted in Pakistan Railways hospital, a semi government, hospital affiliated with IIMCT. This hospital offers the fellowship training program in specialties including gynecology, surgery, medicine, ENT, Anesthesia. Since the female trainee doctors were not present in all the departments of railway hospital so another semi government was taken. Fifteen female doctors working as a trainee were interviewed by using semi-structured questionnaire. They were inquired about challenges and issues faced by them in their training. Thematic analysis of the available data was carried out. Themes identified in the data were compared with themes already explored in literature.

Results: Fifteen in-depth interviews revealed themes related to challenges faced by female trainees. All of them strongly believed that training is very tough and hectic, and they came across many, departmental, institutional, and personal problems during their training. All of them expressed their intense motivation for the training, but still felt it to be demanding. They believed they had paid a heavy price for this training by sacrificing prime time of their youth and family.

Conclusion: Female encounter countless barriers in their fellowship trainings which is a step forward towards their career development. They come across institutional as well as personal barriers which affect career progress.

Title: Effectiveness of COACH2COACH and R2C2 (Relationship, Reaction, Content, Coaching) Model in Improving Peer feedback For Student's Professional Development

Author: Sana Siddiqui, Usman Mehboob, Saadia Muneer, Sana Shah, Azhar

Institute: National University of Medical Sciences, Pakistan

Abstract:

Aims: Peer feedback is a powerful learning technique that helps students to improve their academic success and educational satisfaction. It is possible to clarify the goals of peer feedback with training. The goal of this study is to evaluate the effectiveness of peer feedback as an educational intervention, using two models.

Methods: A randomized experimental intervention study was conducted to evaluate the effectiveness of COACH2COACH and R2C2 models in improving peer feedback for students' professional development. It was performed on final-year undergraduate students at the Armed Forces Institute of Dentistry. To independently assess the efficacy of the models, the population was divided into two groups. A peer assessment tool (mini-PAT) was used that focused on five different areas with pre-and post-educational intervention tests. It included good clinical care, maintaining good medical practice, training and teaching, relationships with patients, and working with colleagues, focusing on enhancing peer feedback for students' professional development.

Results: This study demonstrates the effectiveness of teaching peer feedback skills through COACH2COACH and R2C2 workshops. Pre- and post-educational intervention tests were performed using Mini peer assessment questionnaire (mini-PAT). It was filled by all participants before and six weeks after workshops constituting a response rate of

100%. Following the workshops, there was a substantial improvement in all domains with the COACH2COACH model. Although the R2C2 model also showed a significant improvement, two of the questionnaire items in this model showed no difference. Both models increased students' peer feedback abilities, allowing them to grow professionally, though COACH2COACH model was deemed more efficient.

Conclusion: Students' skilled learning workshops significantly increase feedback abilities before and after COACH2COACH and R2C2 workshops. However, COACH2COACH model is more effective for teaching feedback skills in achieving long-term behavioral outcomes.

Title: Translation and Cultural Adaptation of Phonological Awareness Skills Test in Urdu

Author: Fehmina Mughal, Humaira Shamim Kiyani

Institute: Behavior and Special Education Services (BASIS), Pakistan

Abstract:

Aims: Phonological awareness is the ability to attend, isolate and manipulate sounds in a spoken language. The Phonological awareness skills test (PAST) is one such test that assesses these skills across 16 different domains.

Objectives: To translate and culturally adapt PAST in Urdu and demonstrate its reliability and validity.

Methods: PAST was translated and culturally adapted following multiple steps that included forward translation, review by the experts, backward translation, removal of discrepancies, and finalization of the translated version. To determine the reliability and validity of the translated version of the test a pilot study was conducted on 100 individuals (80 typical, 20 atypical). The participants in the study were 4 to 8 years old male and female bilingual individuals and the sampling

technique used for this study was convenient sampling technique.

Results: The reliability of the test was analyzed through cronbach's alpha, the result showed .96 reliability of the tool. Furthermore, the test-retest reliability of 9 out of 16 domains was significantly high ($p < .001$), while concurrent validity of all the domains except one was in an acceptable range.

Conclusion: The tool was translated, culturally adapted, and found to be valid and reliable tool for the assessment of phonological awareness skills of 4 to 8-years-olds after a pilot testing.

Title: Time Per Question in Assessment, Do We Need to think Differently in Non-Native English-Speaking Medical Students?

Author: Muhammad Shabbir

Institute: College of Medicine at Shaqra, Shaqra university, Saudi Arabia

Abstract:

Aims: Students may take longer to comprehend a question if they are not native English language speakers. Similarly, the time to comprehension depends on the average word count per item. This study aimed to determine the average acceptable time per item while assessing undergraduate students whose native language is not English.

Methods: The study was conducted during End block exam of emergency medicine course taught to the fifth-year medical students. The time taken by each student to complete a 60 questions MCQ paper was noted. Post exam the students were surveyed about the quality, clarity and difficulty of questions. The students were asked if they considered the time allotted to paper was sufficient, or they considered the time should be increased or reduced. The data was analysed through jamovi. Cronbach alpha for questionnaire, Average word count per item, time taken to complete the paper was calculated along with other descriptive statistics.

Results: The paper comprised of 60 questions and the time allotted was 120 min. All students (N=17) completed the task before time. The average word count per question was 68. The average time taken by students to complete the exam was 86 min (86 seconds on average to answer each question). The students labelled the questions moderately difficult. All students except one considered the time allotted (2min per question) as sufficient and did not recommend reducing the time. Overall, the students were satisfied with the quality and clarity of questions. The reliability of survey questionnaire was 0.79 through Cronbach's alpha.

Conclusion: The non-native English language speakers require longer time to comprehend questions. The average time given to attempt an MCQ of 70 words per item should be around 90 seconds.

Title: Lessons Learned from Preparing a Self-Study Report for Program Accreditation Using Contextualized BME WFME Standards

Author: Khabab Elhag

Institute: Libyan International Medical University LIMU, Libyan Arab Jamahiriya

Abstract:

Aims: Program accreditation is the process of verifying that a program meets or exceeds a set of standards established by a professional organization or accrediting body. We aim to identify and document the lessons learned from preparing a self-study report for the Bachelor of Medicine program, at Libyan International Medical University.

Methods: The Libyan International Medical University is committed to high quality. When the Libyan National Center for Quality Assurance and Accreditation of Educational and Training Institutions adapted and contextualized the "BME WFME Standards" into national Standards for accreditation of basic medical education programs, the

university immediately began the process of self-study to identify gaps and improve its program. The university established a self-study committee with members from all phases of the program, and a quality and accreditation advisor were provided to support. Lessons learned were observed and collected from the team while they are participating in preparing the self-study report.

Results: To ensure competent and safe graduates, the university implements a four-phase curriculum that includes clinical, basic science, and internship phases. The curriculum is aligned with assessment methods and best teaching and learning practices. Through the self-study process, we learned the importance of Understanding accreditation standards, collaborating with stakeholders, complying with national and international regulations, standards, and policies, Using evidence-based practices, Transparency, Interpersonal skills, and Continuous quality improvement. Accreditation success requires Attention to detail, Evidence-based practice, Clear collaboration structure and governance, Documentation of processes, Compliance with regulations, standards, and policies, and Alignment with vision and mission.

Conclusion: Preparing for accreditation can teach medical schools valuable lessons on standardization, collaboration, and evidence-based practice. These lessons can help them improve and ensure students receive quality education and training.

Title: Revival for Education: Training of Trainers in Azerbaijan State Advanced Training Institute for Doctors (ASATID)

Author: Shafa Babadullayeva..

Institute: Azerbaijan State Advanced Training Institute for Doctors (ASATID) named after A. Aliyev, Azerbaijan

Abstract:

Aims: Faculty development plays a crucial role in enhancing the educational capacities of faculty members. ASATID, a renowned institution established in 1935, is dedicated to supporting physicians through continuous professional development (CPD) programs and providing post-graduate education, including residency and doctoral programs. This study aims to introduce the Train-the-Trainer (ToT) program.

Methods: To evaluate the ToT program, a range of evaluation methods were employed. Daily feedback allowed participants to compare their experiences across various aspects of the training. A pre-posttest consisting of 13 multiple-choice questions was used to measure participants' knowledge levels. Additionally, a pre- and post-course self-efficacy questionnaire (PCS-EQ) was administered to gauge participants' perceptions of their roles as trainers. An End-of-Course Satisfaction Survey (EoCSS) was conducted to assess positive aspects, problems, improvements, usefulness, and overall experiences during the training. Data were analyzed using the SPSS database, and the results were reported in terms of numbers and percentages.

Results: The study involved 81 participants who attended seven courses held during 2022-2023. The results revealed a significant increase in correct answers compared to the pretest, indicating improvement in participants' knowledge levels. Moreover, there were notable differences in PCS-EQ. The participants expressed high satisfaction (overall score:9.82) and provided positive feedback on the training's importance and quality, suggesting the potential benefit of extending the educational duration. Notably, ten participants were trained as assistant trainers during these courses, contributing to the capacity building of the institution. The study emphasized the need for widespread

education, and institutional renewal, highlighting the significance of advanced training.

Conclusion: The study underscores the importance of CPD, particularly through effective ToT, in enhancing the educational capabilities of faculty members and advancing institutional excellence.

Title: Exploring Perceptions of Healthcare Professionals and Students on Scope of Artificial Intelligence in Education

Author: Mominah Ambreen, Dr Sundus Ambreen

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: It aims to explore opinions on the potential benefits of AI in enhancing the quality of healthcare education, concerns regarding the ethical implications, challenges in integrating AI into the existing healthcare education, and the need for proper training and skill development for professionals and students to effectively utilize AI technologies.

Methods: In-depth interviews will be employed to gather data from a purposive sample of healthcare professionals and students. The sample size will be 12. Inclusion criteria are 3 medical faculty members with a background in medical education, 3 psychology faculty members involved in healthcare education curriculum development, and 6 undergraduate students from senior years i.e., 3rd, 4th, and final year. The interview guide will be established with the assistance of Subject Matter Experts which will include healthcare professionals involved in education. Interviews will be audio recorded and transcribed verbatim. A manual thematic analysis will be employed to conduct an analysis.

Results: In process

Conclusion: The expected findings will be

proven beneficial for the integration of Artificial Intelligence in healthcare education.

Title: Anatomy Education During the Covid-19 Pandemic: A Systematic Review and Narrative Synthesis

Author: Sumaya Omar Hussein, Surin Lee , Surin Lee; Mange Manyama

Institute: Weill Cornell Medicine-Qatar, Qatar

Abstract:

Aims: The Covid-19 pandemic at the end of 2019 caused restricted business and social spheres because of the measures taken to limit and contain the spread of Covid-19 infections. As a result, the delivery of higher education at universities and medical schools was severely affected. **Methods:** This article systematically reviewed the various methods used to deliver anatomical education, including lectures, practical labs, and assessments at different universities during the Covid -19 pandemic. The challenges that faced faculty, staff, and students in delivering anatomical education were also investigated.

Results: The transition from traditional face-to-face lectures or assessments to online learning was less complicated, and anatomy practical teaching was the most challenging to redesign. Anatomy practical labs were delivered using digital anatomy resources in most universities that aimed to provide a “hands-on-like” experience. These resources include 3D virtual software, digital Anatomage table, virtual microscopy, and broadcasting of the live dissection sessions. Some of the challenges faced by students include reduced interaction between students and lecturers and among students themselves; unstable learning environments like at-home distractions and technical challenges; and lack of access to learning resources like cadavers and anatomical models.

Conclusion: This review reports on how the pandemic brought to light the disparities in

education systems and highlights the importance of further investigation to ensure equitable access and optimal utilization.

Title: Professional Ethics in Medical Profession: An Islamic and Western Thought Framework For Contemporary Practice

Author: Shehla Riaz

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Medical professionals are entrusted to treat and make decisions for the wellbeing of patients honestly. The aim of the study is highlighting the significance of acting in the best interests of patients, avoiding harm, promoting respect, fairness, trust, confidentiality, integrity, and obtaining informed consent.

Methods: Qualitative, Comparative, analytical.

Results: The results of the research show that Professional ethics has an important role in achieving long-term outcomes. Professional ethics in medicine are critical for promoting patient-centered care, trust, and societal well-being. Maintaining ethical principles allows healthcare professionals to navigate complex dilemmas, make informed decisions, and foster a collaborative healthcare environment, while also promoting patient autonomy, advocating for equitable access to healthcare, and maintaining transparency. Furthermore, advancements in medical technology present new ethical challenges. To ensure patient welfare and prevent potential harm, medical professionals must navigate these issues.

Conclusion: The creation of professional codes is a need of time for developing behavioral guidelines in collaboration with colleagues. The medical profession ultimately ensures the provision of compassionate, competent, and patient-centered.

Title: Beyond Paper and Pen: Mentors' Perspectives on e-Portfolios in Medical Education

Author: Tayyaba Azhar

Institute: FMH College of Medicine & Dentistry, Islamabad, Pakistan

Abstract:

Aims: An e-portfolio is a personalized online space where individuals can document their past learning experiences, current work progress, and future career plans. The objective of this study is to investigate how mentors perceive the implementation of e-portfolios in undergraduate medical education.

Methods: Interviews were conducted with faculty members who mentored medical students in portfolio development. The interviews were transcribed and analyzed to identify recurring themes and patterns.

Results: This study reveals that portfolio provide a comprehensive representation of the student's learning journey, fostering lifelong learning and critical thinking. E-portfolios enable longitudinal assessment, tracking progress over time and offering a holistic view of competence and growth. Through mentor meetings, they promote active learning and collaboration with peers and faculty. Portable and accessible, e-portfolios allow students to present their work in various settings, benefiting future career prospects. According to the mentors integrating portfolios into the curriculum significantly enhances the educational experience, serving as valuable tools for showcasing accomplishments.

Conclusion: E-portfolios foster lifelong learning, reflection, and professional development. They showcase achievements and enable students to track and demonstrate their competency development, supporting their growth in various domains.

Title: Professionalism Program Evaluation and its Impact on Undergraduate Medical Students at Islamic International Medical College

Author: Sundus Ambreen, Sara Amin, Tasneem Murad

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: The research focuses on understanding how the program influences the development of professionalism among medical students, as well as their perceptions and experiences regarding the program. The study objectives revolve around identifying the strengths and weaknesses of the program from the perspective of the students.

Methods: Fourth-year medical college students were included in the study. Seven groups consisting of eight students each were selected for focus group discussion. Semi-structured questions were asked for discussion and the data was audio recorded and transcribed verbatim. A convenience sampling technique was used for the random selection of students. Students were also observed at their workplace to see the learning transference and behavior change. The evaluation was taken to level 3 of the Kirkpatrick model. Inclusion Criteria: 4th-year medical students, Exclusion Criteria: 1st, 2nd, 3rd, and 5th year medical students.

Results: in process

Conclusion: The findings will contribute to the ongoing efforts in medical education to promote and nurture professionalism among undergraduate medical students, ultimately aiming to enhance their patient care and professional development.

Title: Expert Prediction of Item Difficulty Versus Difficulty Index measured by Psychometric Analysis

Author: Memoona Mansoor, Shazia Imran, Ali

Tayyab, Rehman Sarfraz, Amina Masroor

Institute: Islamabad Medical and Dental College, Islamabad, Pakistan

Abstract:

Aims: The item difficulty is determined in two ways; one approach relies on expert judgments, and the other uses data from test administrations (psychometric analysis). We compared the item developers' perception of item difficulty with the one obtained from psychometric analysis and explored the thought process behind categorizing items by developers.

Methods: This was an explanatory sequential mixed-method study. This was an explanatory sequential mixed-method study. Test developers' difficulty ranking of the items for all the preclinical years' end-of-module exams was compared with that measured through psychometric analysis obtained from the OMR (Optical Mark Reader). Pearson's correlation was used to infer the correlation between item writers' perception of item difficulty and Right mark analysis. Cohen's Kappa was used to check the agreement between the two. The item developers were interviewed through an open-ended three-item questionnaire. Interviews were recorded and transcribed. Themes and subthemes were identified from interview data through manual coding. The anonymity

Results: A total of 1150 items of 20 item developers were compared. There was a weak positive ($r=0.11$) but statistically significant correlation ($p = 0.000$) between faculty perception and Rightmark analysis of the item difficulty. However, there was no agreement between the two measurements (Cohen's Kappa $k = 0.042$, $p = 0.027$). Only two writers showed the highest level of agreement (Cohen's $k = 0.189$, $p = 0.010$ & Cohen's $k = 0.178$, $p = 0.068$). The interviews of item developers identified three major themes; the characteristics of the learners, the

construction of the item and the content targeted.

Conclusion: The ranking of items by majority of the item developers did not match the psychometric analysis of difficulty index. The item developers should be trained in critical thinking and reflection.

Title: Teachers' Perceptions of their Learning Activities in Traditional and Integrated Curriculum of two Medical Colleges

Author: Rehman Sarfraz, Rahila Yasmeen

Institute: Islamabad Medical and Dental College (IM&DC), Islamabad, Pakistan

Abstract:

Aims: Educational environment facilitating the process of teaching and learning helps to achieve the learning outcomes; learning activities forms an important pillar of this environment. This research was carried out to compare teachers' perceptions of their learning activities in traditional and integrated curriculum of two Pakistani medical colleges using AMEET inventory.

Methods: This research was carried out in two private Pakistani medical colleges having traditional and integrated curriculum. The participants were divided into two groups: A ($n=92$) and B ($n=91$) for traditional and integrated curriculum respectively. The faculty members teaching MBBS and BDS students with experience of six or more months in their present institute were included in this study after their consent. IRB approval was taken from both colleges. Quantitative, descriptive, cross-sectional survey was carried out by using valid and reliable AMEET inventory. Independent sample t-test was used to find out the difference of learning activities between two groups.

Results: In this study the mean value of faculty perceptions of learning activities representing Group A (traditional curriculum) was 66.82 and for Group B (integrated curriculum) the mean

value was 73.10. Statistically significant difference was found between the two groups (p -value ≤ 0.05). The learning activities revolved around the viewpoint of faculty about actively engaging the students in student-centered learning where the students can be life-long learners, have opportunities to develop competence and confidence, have vision about the course expectations and avail chances to build their confidence and convert their knowledge into practice in a favorable educational environment.

Conclusion: The integrated curriculum positively influences the perceptions of faculty members about their learning activities. This study can be conducted on larger population to generalize the results and establish cultural differences.

Title: Dimensions of Wellness: A Multidimensional Concept

Author: Mehvish Jjaved , Nadia Zohair, Manahil Rahat

Institute: Islamabad Medical and Dental College, Islamabad, Pakistan

Abstract:

Aims: It's been shown that good health directly impacts people's mental, emotional, physical, and financial well-being and is an actively pursued goal among medical students. The objective of study is to assess how medical students adhere to various aspects of well-being in the context of physical, emotional, and Spiritual Wellness.

Methods: The cross-sectional questionnaire-based survey was conducted from January to December 2010, comprising randomly selected 300 male/female medical students in Riphah International University. The responses -'no,' 'sometimes,' 'mostly' and 'yes/always' (numbered 0-4) -were analyzed in terms of frequency, proportion, and percentages by Predictive Analysis Software (PASW).

Results: Of the 300 questionnaires, 287

(95.7%) fully completed questionnaires comprised the study universe. According to the survey, 103(35.89%) respondents were male, and 184 (64.11%) respondents were Female. Sickness and sports affect physical Wellness concerning Gender having p values 0.0159 and 0.0240. Family friends and mood swings affect emotional Wellness having p values 0.0059 and 0.00. Prayer and Spiritual Fasting involves Spiritual Wellness having p values 0.0024 and 0.0116. Tukey simultaneous comparison t -values are ($df = 858$), also showing that Spiritual Wellness significantly differs from emotional Wellness and physical Wellness of respondents.

Conclusion: Medical students should practice stress and time management techniques to learn to cope with pressures of practicing medicine. Research into gender bias in Health and Wellness needs to be expanded.

Title: Occupational Stress in Doctors – Does Medical Education Help Coping with Burn-Out?

Author: Asma Nudrat Zafar

Institute: Foundation University Islamabad, Pakistan

Abstract:

Aims: Physical and mental well-being of health-care professionals is vital for efficient delivery of care to the masses. There are multiple causative factors of occupational stress among doctors. We aim to determine the frequency of burn-out in doctors who have received medical education training and those who have not.

Methods: An online questionnaire was sent to doctors of all specialties in different hospitals of the country. Besides demographic details, they were enquired about their working hours and on-call days per week, level of medical education received and presence or absence of burn-out in their career. Statistics were calculated by using Statistical Package for

Social Sciences version 21. Chi-square test was applied to calculate the statistical significance of difference between the two groups of medical educationists and non-medical educationists.

Results: Out of 183 participants, 77% were female and 23% were male. Formal training in medical education was received by 137/183 (74.9%) and 46/183 (25.1%) had no experience of medical education. Among medical educationists, 114/137 (83.21%) had felt burnt-out in their career, while 23/137 (16.78%) never felt stressed-out in their profession. The Chi-square statistic was 0.93; p-value being 0.33 (not significant at $p < 0.05$).

Conclusion: Professional burn-out is prevalent in medical profession in both groups i.e., those who have received medical education training and those who have not.

Title: Prevalence of Burnout in a Public Sector Medical College of Azad Kashmir in Pakistan: Cross Sectional Study

Author: Qurat Ul Ain

Institute: Div Headquarter Teaching Hospital, Mirpur AJK, Pakistan

Abstract:

Aims: This is a cross sectional research to study the prevalence of burnout among physicians and preclinical faculty of Mohtarma Benazir Bhutto Shaheed Medical College Mirpur Azad Kashmir and its allied teaching hospital. 124 subjects participated in this study from the departments of medicine, surgery, gynecology, and obstetrics, paediatric and preclinical.

Methods: Cross sectional design with Convenience sampling was used. The Mallasch Burnout Inventory was used as a proforma to assess the burnout level of the physicians. This is the most widely used validated research tool to assess burnout level in literature (Hodkinson et al., 2022). We used a relatively strict criteria of defining burnout whereby Individuals were

considered burnt out if they got a high score in emotional exhaustion and either a high score in depersonalization or a low score in personal accomplishment. Data was also collected on gender, age, department, marital status and on call frequency.

Results: Total 124 participants became part of the study. Mean age was 29 years; 74% (92/124) were females. There were house officers (47), consultants(13) and PG residents(48). Participants were from the surgical department (45), medicine(34), gynae(14), paediatric(17) and preclinical departments(14). The burnout level was 47 % (58/124) in all participants; 50% (55/110) in clinical and 21% (3/14) in preclinical specialties. Mean scores in emotional exhaustion, depersonalization and personal accomplishment were 29, 13 and 28 respectively. 34% (11/32) of males and 51% (47/92) of females were burnt out. The highest level of burnout was seen in the house officers at 64% (30/47). followed by.(continues)

Conclusion: Burnout in physicians, especially junior doctors Is a serious issue that needs to be dealt with. Consideration needs to be given on managing workload, so they don't feel excessive stress.

Title: Psychometric Characteristics of The Azerbaijan Version of Medical Achievement Self-Efficacy Scale (MASS AZE)

Authors: Samira Mammadova, Aynur Baylarzade, Sevgi Turan

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: Self-efficacy is accepted as a mediator of behavioral change and was showed that its relationship with achievement. Self-efficacy is important variable to evaluate the overall curriculum. In this study, we examined the reliability and construct validity of Medical Achievement Self-Efficacy Scale (MASS) within

Azerbaijan military medical students.

Methods: The MASS is an 18-item, five-point Likert-type scale. The minimum and maximum scores that can be obtained from the scale vary between 18-90 points. It was reported that Cronbach's alpha for the original form of the scale was 0.89 and item-total score correlations ranged between 0.39 and 0.64. The study was conducted with undergraduate military medical students at Azerbaijan Medical University (n=250). A panel of experts was translated the scale, and then back translated. Cronbach alpha was calculated for reliability of scale. Item-total correlation was calculated and the scores of lowly and highly performing groups were compared by t-test.

Results: All items discriminated significantly between lowly and highly performing students. Factor analysis showed that all items load on one factor which explained 56.26% of the variance. Factor loadings ranged from 0.59 to 0.84.

Conclusion: The Azerbaijan adaptation of the MASS was found to be reliable and has construct validity.

Title: Being an International Student at Azerbaijan Medical University

Author: Aydan Gadimli, Gorkhmas Ahmadov, Orkhan Isayev, Nilufer Demiral Yilmaz, Ozan Karaca, Hasan Odabasi, Hande Harmanci, Halil Ibrahim Durak

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: Navigating the trials of university life, such as academic and social integration, personal autonomy, decision-making, individuation, and interpersonal relationships, can be particularly demanding for international students studying outside their home culture. This study is centered on gaining insight into international students' experiences and their adaptive mechanisms at

Azerbaijan Medical University.

Methods: In this cross-sectional study, we used convenience sampling to engage international students from the faculties of medicine, dentistry, and pharmacy. A comprehensive 56-item questionnaire deployed via Google Forms, based on a 4-point Likert scale, assessed academic hardships, financial constraints, and socio-cultural adjustments. An open-ended section was included at the end to collect qualitative data on students' perspectives.

Results: The response rate of the questionnaire is 16.35 % (n= 344; N= 2104). 43.31% Iranian, 14.82% Turkish, 13.37% Indian, 7.56% Syrian, 6.39% Iraqi, and 14.55% from other Middle Eastern countries. The primary motivators to study in Azerbaijan were low tuition fees (51.2%), education quality (38.1%), and cultural proximity (32.1%). However, 18.89% expressed difficulties finding supportive classmates, and 24.13% instances of denied entry due to their immigrant status. About 30.52% could not allocate funds for social activities, while 47.38% disagreed with having trouble affording their educational expenses. Meanwhile, 57.27% disagreed with experiencing prejudice or disrespect from educators.

Conclusion: Our findings indicate that while international students encounter various challenges, they generally express satisfaction with their education in Azerbaijan, indicating their successful adaptation to the environment.

Title: Adaptation and Validation of the Academic Locus of Control Scale in Azerbaijani Medical Students

Author: Elyana Tahmazova, Aynur Baylarzade, Samira Mammadova, Sevgi Turan

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: The Academic Locus of Control (ALC) Scale is a psychometric instrument that measures an individual's perceived control over academic achievement. This study aimed to adapt and validate the ALC Scale in Azerbaijani military medical students. The reliability of the scale was examined through a comprehensive analysis of psychometric properties.

Methods: Participants in this study were undergraduate military medical students at Azerbaijan Medical University (n=245). The ALC Scale, originally developed by Ak?n (2007), was translated and back translated by a panel of experts to ensure linguistic and conceptual equivalence. Cronbach's alpha coefficient was calculated to assess the internal consistency reliability of the scale. Item-total correlations were examined to evaluate the relationship between individual items and the total score. Exploratory factor analysis was conducted to determine the underlying factor structure of the scale.

Results: The Azerbaijani version of the ALC Scale demonstrated satisfactory reliability and construct validity. The Cronbach's alpha coefficients were 0.86 for external and 0.89 for internal ALC, indicating good internal consistency. Item-total correlations ranged from 0.53 to 0.75 for the external dimension and from 0.72 to 0.87 for the internal dimension, demonstrating moderate to strong associations between individual items and their respective subscales. Exploratory factor analysis confirmed a two-factor structure, consistent with the original scale, with factor loadings ranging from 0.48 to 0.77 for the external dimension and from 0.78 to 0.88 for the internal dimension. The two factors accounted for 51.03% of the total variance.

Conclusion: The scale demonstrated good internal consistency, with satisfactory item-total correlations and a two-factor structure

consistent with the original scale.

Title: Evaluation of the OSCE conducted for Students of the Military Medical Faculty at the Department of MHSE

Author: Ilhama Jafarova, Aydan Gadimli, Elyana Tahmazova, Samira Mammadova, Madina Hajieva, Zarifa Mammadova, Banovsha Huseynova, Vusal Karimov, Nazakat Karimova, Samir Javadli, Nilufer Demiral Yilmaz, Halil Ibrahim Durak, Hande Harmanci

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: The role of Objective Structured Clinical Examinations (OSCEs) in medical education, particularly in evaluating students' professional performance in a setting that resembles a real clinical environment, is increasingly appreciated. The study aims to present analyze results of the students' feedback for the OSCE.

Methods: An "OSCE Evaluation Questionnaire" was administered anonymously by Goog forms to 113 first-year Military Medical Faculty students to evaluate the OSCE conducted at the Department of Medical and Health Sciences Education, Azerbaijan Medical University. The questionnaire comprised 30 items querying the method of learning the application, adequacy of materials and time, and degree of difficulty for 6 stations (drug preparation from the ampoule, intramuscular, intravenous, and subcutaneous injections, basic life support for adults and infants). The responses of 91 students who filled out the questionnaire were analyzed using SPSS software package.

Results: The majority (72.5% and 71.4% at station I, 70.3% and 71.4% at station II, 67% and 65.9% at station III, 67% and 68.1% at station IV, 71.5% and 73.6% at station V, and 73.6% and 70.3% at station VI) responded that they found the time and materials allotted for

applications to be sufficient. They emphasized equal opportunities to practice with and without a guide before the examination. Students felt that the OSCE stations of basic life support in infants (27.5%) & maintaining an intravenous injections (26.5%) were relatively challenging as they were asked to mark the difficulty of stations out of 5.

Conclusion: We concluded that the first-year students at the Military Medical Faculty are satisfied with the OSCE. Areas identified will be taken into consideration for improvement in future examinations.

Title: Enhancing Medical Education Quality through a Training Program on 'Preparation, Application and Analysis of Multiple Choice Questions'

Authors: Madina Hajieva, Aydan Gadimli, Nilufer Demiral Yilmaz, Elyana Tahmazova, Samira Mammadova, Samir Javadli, Halil Ibrahim Durak, Hande Harmanci

Institute: Azerbaijan Medical University, Baku, Azerbaijan

Abstract:

Aims: The Department of Medical and Health Sciences Education (MHSE) is committed to enhance the quality of medical education at Azerbaijan Medical University through strategic planning, structuring, implementation, and evaluation of educational activities. A key part of this commitment is aligning curriculum learning objectives with student assessment, a crucial factor in any training program.

In order to achieve this, a tailored faculty development program - "Preparation, Application and Analysis of Multiple Choice Questions (MCQs Course)" - was developed, implemented and evaluated in February 2023.

Methods: In February 2023, six groups comprising 100 faculty staff members, participated in the MCQs Course. The course covered how to write learning objectives and

linked written questions, focusing on multiple-choice questions. Subsequently, an 18-question satisfaction survey was conducted, probing the program's strengths, potential enhancement, usefulness, and participant experiences. Out of 600 participants, 61 volunteered their feedback, responding with labels like "sufficient," "needs improvement," and "insufficient."

Results: The survey results revealed that 85.2% of the respondents positively assessed the training content and teaching methodologies, 78.7% appreciated the training materials, and 75.4% found the training environment conducive.

A resounding 95.1% praised the professional competency level of the trainers. As for the training duration, half of the respondents (50.8%) found it appropriate, 42.6% proposed optimization by adjusting training hours and extending the training period, while a mere 6.6% deemed it insufficient. Participants recommended more such training, dedicating more time to hands-on learning, and incorporating more examples in the training materials. They emphasized the importance of knowledge about test design and highlighted the friendly and professional organization of the training.

Conclusion. A holistic feedback review indicates that participants found the "MCQs Course" satisfying and effective for their learning needs.

Title: A Model Pattern of Clinical Teaching and Learning, Team Objective Structured Bedside Assessment (TOSBA); Perception of Medical Undergraduates in Obstetrics and Gynecology Department.

Author: Kaweeta Kumari, Shanila Anwar, Shanila Sohail, Shanila Anwar, Nandlal Dhomeja

Institute: United Medical & Dental College, Karachi, Pakistan

Abstract:

Aims: Team Objective Structured Bedside Assessment (TOSBA) is a ward-based formative assessment for students' learning. TOSBA consists of small groups of students who are doing rotations in their clinical years. A patient and facilitators are assigned to each team. Each student performs a clinical task in each time. The tasks are to; take a history, perform a physical examination, formulate a differential diagnosis, investigate, and plan management. The facilitator observes the performance and provides feedback for improvement to the individual student first, who is responsible for performing the task, and then at the end of the activity to the whole team. The fellow students or peers can also contribute to the feedback process making TOSBA a more robust form of active learning.

Methods: Study Design: Cross-sectional study
Setting: Department of Obstetrics & Gynecology, Creek General Hospital, United Medical & Dental College, Karachi.
Duration: March 2018 to March 2020. Sample size: 3rd year= 90 students (n=90), 4th year=85 students (n=85), and 5th year=72 students (n=72). TOSBA was conducted for all students from 3rd to 5th year and was evaluated for their performance by two facilitators of Obstetrics and Gynecology department. An online quantitative questionnaire Google form was disseminated to the students at the end of each OB& G rotation from the 3rd year till their final year (2018-2020). The questionnaire was designed to determine their perception regarding the effectiveness of TOSBA as a teaching methodology as compared to other formats for history taking and physical examination. Responses were marked on a Likert scale (0-5).

Results: The participants agreed that TOSBA was beneficial for their learning of clinical skills. For history-taking skills, TOSBA was helpful in 3rd year with a mean score of $3.72 \pm$

0.94, for 4th year 4.00 ± 0.86 , and for 5th year 4.11 ± 0.99 . For physical examination, TOSBA was helpful for 3rd year with a mean score of 3.82 ± 0.97 , for 4th year $=4.06 \pm 0.82$, and for 5th year 4.19 ± 0.99 .

Conclusion: TOSBA has a positive impact on students' learning and the key elements of TOSBA that is the formative nature, and timely feedback from facilitators and peers are beneficial in the acquisition of clinical skills for medical undergraduates.

Title: How Do Students Perceive the Learning Climate at Azerbaijan Medical University?

Authors: Nilufar Mammadova, Aydan Gadimli, Nilufer Demiral Yilmaz, Samira Mammadova, Ozan Karaca, Kamandar Yaqubov, Orkhan Isayev, Hande Harmanci, Halil Ibrahim Durak

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Author: Kamandar Yaqubov

Institute: Azerbaijan Medical University
Department of Pharmacology

Author: Orkhan Isayev

Institute: Vice-rector for International Relations, Azerbaijan Medical University

Author: Hande Harmanci

Institute: WHO Representative and Head of Country Office

Author: Halil İbrahim Durak

Institute: WHO Country Office Azerbaijan

Abstract:

Aims: The student's perception of their learning environment can serve as a crucial conduit for refining curricula and enhancing learning experiences. Authoritative entities such as the General Medical Council, known for advocating rigorous standards in medical education, endorse regular surveys of students' viewpoints on the learning climate. This study aims to elucidate students' perceptions regarding the learning climate at Azerbaijan Medical University.

Methods: This cross-sectional research is set in the context of undergraduate education at Azerbaijan Medical University. Over the 2022–2023 academic year, students from four distinct academic disciplines responded to the web-based 52-item Preclinical Learning Climate Scale (PLCS), utilising a five-point Likert scale.

Results: The study received responses from 51.59% of students (n: 1379; N: 2673). Of these, 71.50% (n = 985) were pursuing medicine, 10.7% (n = 148) in pharmacy, 8.1% (n = 112) in dentistry, and 9.7% (n = 134) in health sciences. Females represented 69.30% of respondents (n=955), and 89.70% indicated they had willingly opted for their respective faculties. The top five positively perceived aspects were the cleanliness of study facilities (60.5%), advance notice of required learning resources (books, presentations, electronic resources, etc.) (59.9%), respectful teachers (56.6%), well-prepared teachers (55.2%), and teachers' motivation towards educating students (55.2%). On the other hand, the aspects rated negatively included the usefulness of recommended learning resources (34.5%), curriculum alignment with

essential professional skills (32.6%), encouragement towards active student participation (32.1%), adequacy of non-academic facilities such as canteen, dining hall, toilet, etc. (31.8%), and perceived education quality (29.9%).

Conclusions: Despite the teaching staff being the most positively perceived aspect, the teaching subscale received a negative perception overall. This study sheds light on certain aspects of the preclinical learning climate in schools that require attention and enhancement.

Title: Correlation of Personality Traits of Medical Faculty in Leadership Roles with Organizational Citizenship Behavior

Author: Hina Ahmed, Amina Ahmad

Institute: Central Park Medical College, Lahore, Pakistan

Abstract:

Aims: People with positive personality traits possess prosocial attitudes and exhibit constructive behavior by personal choice, which is not their formal job demands called Organizational Citizenship Behavior (OCB). The objective of the current study is to determine the correlation of different personality traits of medical faculty in leadership roles with (OCB).

Methods: It was a correlational study conducted at Central Park Medical College Lahore. Total 48 willing faculty members (basic and clinical) were enrolled. The data was collected through questionnaires after IRB approval, using a simple random sampling design in one year duration. In two phases, the faculty members filled two questionnaires to determine the personality traits and OCB traits. Categories of the personality traits and OCB were determined through scores and means were calculated. Spearman correlation coefficient “r,” was applied to determine the correlation and significance level kept at <

=0.05. The results were positively correlated if the value of $r > 0$.

Results: Altruism($r=0.23$), Courtesy($r=0.09$), and Conscientiousness($r=0.22$) and Sportsmanship($r=0.31$)($p=0.03$) very positively correlated with extroversion. The results supports the first hypothesis. Agreeable personality traits are positively correlated with Altruism($r=0.26$), courtesy($r=0.03$) and Conscientiousness($r=0.19$). The results support the second hypothesis. Conscientious personalities were significantly positively correlated altruism($r=0.36$) ($p=0.00$), Conscientiousness($r=0.45$) ($p=0.00$), and Sportsmanship($r=0.22$). The results support the third hypothesis. Emotionally stable personality traits were significantly positively correlated with altruism($r=0.36$)($p=0.01$), Conscientiousness($r=0.29$)($p=0.03$), and Sportsmanship($r=0.28$)($p=0.05$). The results supports the fourth hypothesis. The open-minded personalities were positively correlated altruism($r=0.15$), Conscientiousness (0.12) and sportsmanship ($r=0.27$) (0.05). In addition, the correlation between Sportsmanship and open-mindedness was positive and significant. The results support the fifth hypothesis.

Conclusion: It is concluded that extrovert, agreeable, conscientiousness, emotionally stable, and open-minded personalities have a significant positive correlation with OCB traits like altruism, courtesy, conscientiousness, and sportsmanship behavior. The results highlighted that different personality traits could influence the culture of organizational citizenship behavior. Hence, postulate practical suggestions for employee selection and add to the deficient literature. Moreover, it was a step to highlight the importance of OCB among the workers.

Title: Integrating Gender Ethics in Undergraduate Medical Curriculum: An Ongoing Effort for Equitable Healthcare

Author: Anita Allana, Nargis Asad

Institute: The Aga Khan University, Karachi, Pakistan

Abstract:

Aims: Integrity and ethics are related to all areas of one's life be it private or public spheres / spaces. There is a gender dimension of ethics which cannot be underestimated; hence it is imperative to include this aspect in the curriculum. To address the same, we at a private medical college in Pakistan have integrated gender into the undergraduate medical curriculum to increase students' awareness of how explicit and implicit or unconscious gender-based prejudices and biases hamper ethical thinking and practice. This effort is beyond the Humanities and Social Sciences course that runs in the Foundation module.

Purpose: The presentation aims to highlight the relevance of integrating gender in the undergraduate medical curriculum, moreover it shall talk about how gender is weaved in the undergraduate curriculum across all the years of medical education. An overview of the curriculum along with integration across the curriculum, challenges faced and addressed will be shared.

Methods: To facilitate understanding and opportunities for application we have integrated gender along with ethics and other disciplines that are included in the longitudinal themes (a few being communication skills, behavioral sciences, culture, and leadership) throughout the five years of undergraduate medical education. The inclusion of this has been a journey starting with a standalone session in the Orientation to its inclusion across the five-year undergraduate curriculum with subject experts and/or clinical faculty as facilitators. In line with best practices, we

utilize diverse pedagogies a few being faculty led presentation cum discussion, case-based discussion/clinical vignettes, movies and video clippings followed by student presentations and discussion, role plays and panel discussions.

Results: Gender-sensitized individuals, especially health care professionals, are better equipped to be ethical professionals as a sound understanding of gender and ethical practices go hand in hand. Moreover, gender awareness in physicians leads to equality and equity in health care resulting in better health outcomes in men and women.

Conclusion: Sound understanding of gender and related issues, dilemmas and concerns by physicians leads to equitable healthcare.

Title: From Classroom to Consultation Room: Integration of Behavioral Sciences in Medical Education

Author: Nargis Asad, Anita Allana

Institute: Department of Psychiatry Aga Khan University, Karachi, Pakistan

Abstract:

Aims: Human behavior is the result of a complex interplay of various factors such as biological, psychological, socio-cultural, and economic factors; These factors also influence illness and disease models. Empirical research provides evidence that a well-rounded and competent physician is also well informed not only of the socio-cultural nuances but also has effective communication skills which is an essential element of doctor-patient relationship. Primary objectives of the proposed presentation will be to share core behavioral sciences concepts covered in the medical curriculum at Aga Khan University Karachi, presentation will also include an overview of intersection of professional attributes expected of a medical graduate at AKU and the curriculum offered at an undergraduate level.

Methods: Primary objectives of the proposed presentation will be to share core behavioral sciences concepts covered in the medical curriculum at Aga Khan University Karachi, presentation will also include an overview of intersection of professional attributes expected of a medical graduate at AKU and the curriculum offered at an undergraduate level.

Results: Presentation will provide an understanding of the pedagogies applied to impart curriculum in line with best practices for medical education, the pedagogies are aimed at providing trainee physicians to be creative, innovative, and self-driven adult learners. Teaching-learning pedagogies range from didactics to experiential learning formats, digital technology is central to medical education at AKU. use of digital tools such as Kahoot, padlet etc will also be covered.

Conclusion: As Socrates said it is impossible for the part to be well if the whole is not well. Unless physicians look beyond clinical symptoms that patients present with, they will be more like robots than empathetic healers.

Title: The use of modern clinical methods as a way to improve students' understanding of the anatomical variants of the structures that make up the skull

Authors: Vagif Shadlinski, Anar Abdullayev

Institute: Department of Human Anatomy and Medical Terminology, Azerbaijan

Abstract:

Aims: The addition of classical methods of teaching anatomy to such an important component of the skeleton as the skull with multimedia tools has certainly improved the quality of the students' comprehension of the subject. However, the widespread introduction of modern methods into clinical practice sets the task for anatomy teachers to prepare students, giving them the basic concepts of radiological and tomographic anatomy. The skull is rich with various

anatomical variants of its components, which are often mistakenly perceived in the clinic as pathological conditions, causing medical errors. The aim of the investigation was to identify the impact of the use of computed tomography on improving interest in the study and understanding of the anatomical variants of the structures that make up the skull.

Methods: The study involved students of the Azerbaijan Medical University who took practical classes at the Department of Human Anatomy and Medical Terminology. Anatomical variants of the skull structures, such as the sutural bones, the meningo-orbital foramina, and the caroticoclinoid foramen, were explained to students both in a classical way (explained on craniological material) and with the help of multimedia tools. In practical classes, computed tomograms of these skulls were also used. After the classes, a survey was conducted among students on the effectiveness of the methods.

Results: The results of the survey showed that the classical method of explanation based on craniological material was relevant. Students spoke in favor of this method because it further implies independent work with the bones of the skull. The majority of students had a positive opinion about the use of multimedia in the classroom, which motivated them to repeat material outside the classroom. In other words, by downloading the lesson material to their devices, students get constant access to it. A certain part spoke out in favor of the use of computed tomography, with which classes, although they became somewhat "heavy", were quite "attractive" and "productive", taking into account the future.

Conclusion: In our opinion, a successful combination of the listed methods will certainly make classes more attractive and effective.

Title: Interactive Methods as Tools to Increasing Motivation and Effectiveness of Medical Students to Study Histology Course

Author: Sabina Israfilova S.A, Gasimov E.K.

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: The aim of this research was to study the effectiveness of using interactive methods, such as Kahoot, Multimeter etc., to increase the interest of medical students in the histology course. As part of the study, percentage indicators of improvement in the results of student participation and activity were identified.

Methods: The research used a group of students at the Azerbaijan Medical University studying the course of histology. They were offered the above-mentioned interactive methods, using a multimedia demonstration of histological specimens. The indicator of students' interest was the percentage indicators of improvement of their participation and activity.

Results: Multimedia demonstration of electromyograms, histological and immunohistochemical specimens using resources such as Kahoot, Multimeter, etc. showed positive results. In comparison with traditional teaching methods, students involved in these activities showed an increase in the percentage of participation and activity in histology lessons. Surveys and tests conducted using the Kahoot platform showed a 20% increase in interest. The use of the Multimeter led to an increase in student participation by 15%.

Conclusion: The usage of interactive resources increases students' interest in histology courses, evident from higher rates of active student involvement, emphasizing the significance of interactive methods in the learning process.

Title: Need for Integrating Trauma Informed Clinical Interviewing Skills in Medical Education: Learnings from a Hands-On Workshop With Post Graduate Trainees

Author: Nargis Asad, Shahina Pirani, Armeen Gondil, Tania Nadeem

Institute: Department of Psychiatry, Aga Khan University Hospital, Karachi, Pakistan

Abstract:

Aims: We aimed to build the capacity of Psychiatry and Emergency medicine trainees on trauma management through workshop on screening, conducting clinical interview and offering Psychological first aid to survivors of domestic violence and abuse. Domestic violence and abuse are one of the traumatic experiences that leads to serious mental health sequel. Violence victims contact health care professionals (HCP) without disclosing violence to them; unfortunately, HCP are not adequately trained to identify victims.

Methods: We present data obtained as pre and post test conducted in a 12-hour workshop conducted over 04 half days at a public sector teaching hospital in Karachi Pakistan. There were 22 participants out of which 15 were females and rest were males.

Results: Participants were from a public sector teaching hospital. The workshop revealed significant improvement in participants knowledge on screening ($p=0.0264$) and psychological first aid ($p=0.0009$).

Conclusion: Ongoing in-service trainings are needed for sustainable change in HCPs' knowledge and clinical practice. In local training programs of medical education, an important skill building on clinical interviewing and management of trauma and domestic violence should be inculcated.

Title: Climate-Integrated Medical Education: Knowledge, Attitudes, and Practices of Medical Students "Example from Turkey"

Authors: Demet Koc, Kemal Yang, Melike Yavuz

Institute: Bahçeşehir University Medical School, Turkey

Abstract:

Aims: The increasing severity of the health impacts of climate change necessitates climate-resilient health systems. One of the most important requirements for making health systems climate resilient is the preparedness of health professionals. This study aims to examine medical students' knowledge, attitudes, and practices related to climate change education.

Methods: The data of this cross-sectional study, conducted at the Faculty of Medicine, Bahçeşehir University, were collected using an online questionnaire between April and May 2023. The questionnaire, prepared by the researchers based on the literature, consisted of 27 questions, including sections on demographic information, knowledge, attitudes and skills, and education needs on climate change. No sample selection was made, and an attempt was made to reach all medical school students without distinguishing by class.

Results: A total of 439 (54%) students answered the survey. Students highly agreed with the statement that climate change will negatively impact their health and their future patients. Although students strongly agreed that knowledge of climate change is important for physicians (81%). 40% of participants felt comfortable in counseling patients on the health effects of climate change, 19% comfortable in diagnosing and treating climate-related diseases. When asked at what level climate change should take place in medical education, respondents answered mandatory preclinical curriculum 47%, preclinical elective 53%, clinical elective curriculum 33%, and residency training 19% (multiple responses).

Conclusion: Medical students have sufficient knowledge and attitudes about climate change

but need more skills. Integrating climate change into the curriculum is necessary, but this must be accomplished with student engagement.

Title: Development of an Anatomy Core Competency Framework: A Step towards Integrated Anatomy Teaching

Author: Syarifah Aisyah Syed Abd Halim

Institute: School of Medical Science, Health Campus, University Sains Malaysia, Kubang Kerian, Kelantan, Malaysia.

Abstract:

Aims: Competency-based education prepares medical graduates to practice medicine efficiently in line with local health needs. To achieve this aim, a comprehensive anatomy core competency framework—which is important for safe clinical practice—was developed for medical undergraduates, to ensure that they acquire the required competencies in anatomy.

Methods: The framework was developed using a multimodal approach that explores elements of anatomy competency through a scoping review, analysis of standards referral documents, focus group discussion with the final-year medical students and semi-structured interviews with the junior doctors. The relevant competencies gathered from these methods were identified, mapped, and triangulated to produce a comprehensive anatomy core competency framework. The framework underwent a content validity evaluation by 12 content experts from anatomy, medicine-based, surgical-based, and lab-based disciplines, whose responses were used to calculate the content validity indices.

Results: The analysis identified five competency domains that form the core of the framework, namely anatomy knowledge comprehension, anatomy knowledge application, anatomy knowledge integration, anatomy knowledge translation and generic

competency. The content validity assessment revealed that four items and two domains did not achieve a lower limit of acceptable value for item-level content validity index (I-CVI) and scale-level content validity index (S-CVI/Ave) respectively. To improve the I-CVI and S-CVI/Ave scores, the framework was revised according to the content experts' recommendation and the final revised version was proposed for integrated anatomy teaching.

Conclusion: Notwithstanding the impact of this framework on anatomy-integrated teaching, an instructional design strategy is required to enhance its efficacy.

Title: East Meets West: A mixed methods study of Medical Students' Exchange Program on Integrative Oncology

Author: Chi Wing Tam, Fan Cheung Yibin Feng

Institute: LKS Faculty of Medicine, The University of Hong Kong, Hong Kong SAR, Hong Kong

Abstract:

Aims: To address the inadequacies of current medical education and fulfill the pressing need to develop integrative oncology, two faculties from Hong Kong and Germany initiated an exchange programmed for their students. This paper presents the design, implementation, and evaluation of this programmed.

Methods: A five-day programmed consisted of lectures in integrative oncology, Qigong practice, site visits to botanical garden and palliative care unit, as well as group work and other cultural activities was held in Germany in 2018. A total of 32 student have participated. The programmed was evaluated according to the modified Kirkpatrick's model. This is an explanatory sequential mixed methods study. Quantitative data were test scores of multiple-choice questions in the pre- and post- tests. Qualitative data were obtained from reflective

journals and interviews.

Results: A small increase in scores is observed. There was a statistically significant mean increase of 1.409 ($p=0.0114$) in total score for Chinese Medicine students with a medium effect size. There existed a moderate correlation with Pearson's $r=0.399$ ($p=0.0261$) between academic year and scores in the question part on Western Medicine. Several themes emerged. Participants were intellectually inspired to integrate and recognized the need for research. Chinese and German students learnt and worked well together. Dialogues between them were highly commented. While they asked for less lectures and more discussions, how different factors affect their readiness to engage were described. Problems include the lack of prior knowledge and lack of communication on objectives. Qigong practice sessions and the visit to palliative care unit were the most engaging experiences. Upon immersion, time spent together were enjoyable and facilitated the development of cultural competence. Furthermore, different emphases among junior students and some unexpected learning outcomes are observed.

Conclusion: Discussions and Conclusion: Participants reacted positively and formed a powerful intercultural learning community, with multiple competencies cultivated. The group dynamics were catalyzed by differences and unfamiliarity. Knowledge gain was observed. Without much prior knowledge, junior students were less ready to engage in activities pertaining to the theme, but the impact was still considered meaningful. Other theories such as Vygotsky's sociocultural theory should be considered. This program was effective in terms of interdisciplinary and intercultural elements. It was a good start in integrative oncology education. Medical institutions should be encouraged to offer similar opportunities using the

recommendations on lessons learnt.

Title: Artificial Intelligence Meets Item Analysis: A Study of Chatbot Training and Performance in detecting and correcting MCQ Flaws

Author: Mashaal Sabqat,

Institute: Riphah International University, Islamabad, Pakistan

Aims: Multiple-choice questions (MCQs) are commonly used in medical education, but their design requires careful attention to various factors. This article explores the potential of AI-powered chatbots, specifically ChatGPT, in identifying and correcting flaws in MCQs.

Methods: As part of a three-phase interventional design, flawed MCQs were selected from the NBME guide and fed into ChatGPT. In Phase 1, ChatGPT identified item flaws and suggested corrections. In Phase 2, ChatGPT was trained to detect flaws in MCQs based on the best available evidence from the NBME guide. In Phase 3, ChatGPT was tested to detect flaws and provide corrected versions, and the data was analyzed by comparing the flaws identified by ChatGPT with those listed in the NBME guide.

Results: ChatGPT could identify and correct flaws such as the use of "None of the above," "Grammatical cues," "absolute terms," and "inconsistently presented numerical data." However, it struggled with flaws related to "complicated stems," "long or complex options," and "vague frequency terms." After training, ChatGPT became better at identifying and addressing flaws related to complicated stems and absolute terms but struggled with detecting long or complex options and achieving consistency in numerical data. Additionally, it struggled with recognizing "nonparallel options," "convergence," and "word repetition," both before and after training, and erroneously identified "collectively exhaustive options" as a flaw in

some cases. ChatGPT's performance deteriorated during peak hours, indicating its performance could be dependent on server load.

Conclusion: AI is revolutionizing industries and improving efficiency, but limitations exist in complex conversations, analysis, accuracy, and error prevention. Ongoing research is vital to unlocking AI's potential, especially in education.

Title: From Local to Global The Internationalization of a Certificate Course in Health Professions Education in India

Author: Farzana Mahdi, Shabih Zaidi

Institute: ERA University, India

Aims: A faculty development program for health professionals of the University in India was being conducted. An international virtual university indicated a need for such a course in many parts of the world. The journey, its opportunities, and challenges, from the local University level to national and international levels is described.

Methods: Under the leadership of the Pro-Vice Chancellor, in 2019, a modular interactive course covering learning principles, instructional methods, assessment and curriculum was developed after needs assessment and deliberate discussion for newly recruited faculty members. It was held weekly (2hrs) for 6 months. Feedback aided to redraft the course, which was held online, due to COVID-19. The third online course was expanded to the National level with additional module (Beyond educational technology). Following an invitation from Al-Sadiq Virtual International University, the course was redesigned as an eight-month course for international participants meeting the selection criteria and included 4 modules.

Results: The participants increased from 16 to 40 over 4 courses. Each year the course evolved with refinement in learning outcomes,

topics, activities, assignments and recommended self-learning material. Inputs from 10 international faculty revamped it further strengthening the curricular elements. Use of LMS facilitated introduction of asynchronous sessions and formative assessments. Participants found the course useful. Their average attendance was > 90%. Their participation in activities and assignments indicated that desired learning has taken place. Reflections revealed positive attitudinal changes. Resource faculty were comfortable with the schedule. Challenges involved were maintaining motivation, preventing over-burden, adjusting time scheduling, and managing internet problems.

Conclusion: Major factors for success include addressing the needs of the multi-disciplinary health participants; safe learning environment, use of activities and assignments to facilitate learner retention; teamwork among the faculty members.

Title: Teaching Methods in the Baku Branch of I.M. Sechenov First Moscow State Medical University (Sechenov University)

Author: Guliyeva Nurana Mammad

Institute: Baku branch of I.M. Sechenov First Moscow State Medical University (Sechenov University).

Abstract:

Aims: Organization, development, and practical implementation of advanced research competencies among students at a medical university.

Methods: When choosing a teaching methods, we settled on a modular education, as the most promising in terms of the educational process. Upon completion of the module, an academic performance rating is carried out (in the form of testing, module test, test tasks, recitation (oral examination), writing a report and interview, etc.), i.e., unlike the traditional, the modular form of education has the

following types of examination: credit; recitation (oral examination); testing; modular examination; final control. Acquired knowledge is evaluated in the academic credits collected.

Results: Modular education makes it possible for each student to be involved in an active and effective learning and cognitive activity, to work with a program differentiated in content. Individualization of control, self-control, counseling is underway. It is important that the student can self-actualize.

Conclusion: This system of education assists in advancing of each student to a higher level of education. The learning performance, its quality, accustoming to independent study are undeniable prosperous features of education that should be strived for.

Title: Opinions of Medical Students on The Clinical Skills Course at The Azerbaijan Medical University

Author: Banovsha Huseynova, Aydan Gadimli, Ilhama Jafarova, Madina Hajiyeva, Zarifa Mammadova, Samira Mammadova, Elyana Tahmazova, Samir Javadli, Vusal Karimov, Nazakat Karimova, Nilufer Demiral Yilmaz, Halil Ibrahim Durak, Hande Harmanci

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: In addition to theoretical knowledge, skills training is a crucial component of medical education. Since September 2022, the Department of Medical and Health Sciences Education at Azerbaijan Medical University has provided competency-based skill instruction. The purpose of this study is to evaluate the communication, drug administration, and basic life support training from the students' perspective.

Methods: A descriptive, cross-sectional research design was used in this study. Google forms were used to administer an anonymous

15-item online questionnaire to 744 second-year students at the Azerbaijan Medical University. The questionnaire focuses primarily on Kirkpatrick-model Level 1, including appropriateness of topics, achievement of learning objectives, lesson duration, and subject-teaching methodology. For categorical variables, percentage distributions were utilized, while mean standard deviation calculations were utilized for numerical variables.

Results: A total of 538 students expressed satisfaction with the "Clinical Skills-2" lessons in terms of topic adequacy (95.9%), achievement of learning goals (94.2%), and appropriate use of lesson time (82.2%), according to the responses analyzed. Nonetheless, some students identified areas for improvement, including subject-teaching methods (76.8%), insufficient application repetition opportunities, and the absence of skill laboratories for additional practice. These suggestions highlight the need for programmed improvements in the future. Students averaged a score of 9.5 out of 10 when evaluating the clinical skills course.

Conclusion: Based on a thorough analysis of all indicators, it can be deduced that the students' evaluation of the clinical skills course was satisfactory. Not only did the survey benefit course instructors, but it also encouraged students to reflect on course material.

Title: AMU Therapeutic Dentistry Teachers' Assessment of New Curriculum and Syllabus

Author: Jafarova A.R., Abbasova E.M., Mammedova S.M., Pashayev A.Ch.

Institute: Azerbaijan Medical University, Azerbaijan

Abstract:

Aims: Dentistry is one of the most promising arenas of medical education, but at the same time, it is resource-intensive, impacting the quality of practical teaching accordingly. In

recently the Azerbaijan Tibb University has undergone certain changes to improve the student education program. A survey among respondents by specialty is important for collecting information about the attitude to these changes, the degree of satisfaction of teachers and students with the improvements in the curriculum, as well as the quality of the education received in the future.

Methods: The survey was conducted among teachers of the Department of Therapeutic Dentistry of the Azerbaijan Medical University. Respondents were asked questions about changing the program and syllabus to assess the satisfaction of teachers with the curriculum and the training program.

Results: When asked about clinical training, all respondents agreed that increasing the number of clinical hours for practical training contributes to better program coverage, leading to an improvement in the quality of education. It also helps prepare students for independent work as practicing dentists. Also, the inclusion of clinical exams to assess the practical skills of students in the semester exam plan can help teachers better assess the quality of practical education for the semester. The curriculum now includes more time on dental disease and restoration, and comparatively less time on periodontal and oral mucosal disease. In this regard, it would be advisable to make some additions to the currently existing changes. According to the respondents, possible priorities for the future framework for modification and change in curriculum in syllabus could be the creation of interdisciplinary curricula that include a combination of basic and clinical sciences, the provision of some elements of syllabus and curriculum in online format, the development of new methods of assessment by creating and expanding the relevance of rubrics for formative assessment. Due to a significant

improvement in multimedia support during lessons, teachers began to use the latest teaching methods more, giving preference to them.

Conclusion: The survey made it possible to analyze the perception by teachers of the ongoing innovative processes in the curriculum and curriculum, which, in turn, is known to be necessary in order to improve the quality of teaching on the one way, on the other side, student learning.

Title: AI in medical education: uses of AI in construction type A MCQs.

Author: Assad Ali Rezigalla

Institute: Department of Basic Medical Sciences, College of Medicine, University of Bisha, Bisha, Saudi Arabia

Abstract:

Aims: The introduction of competency-based education models, student centres, and the increased use of formative assessments have led to demands for high-quality test items to be used in assessments. This study aimed to assess the use of an AI tool to generate MCQs type A and evaluate its quality.

Methods: The study design was cross-sectional analytics conducted from June 2023 to August 2023. This study utilized formative TBL. The AI tool (ChatPdf.com) was selected to generate MCQs type A. The generated items were evaluated using a questionnaire for subject experts and an item (psychometric) analysis. The questionnaire to the subject experts about items was formed based on item quality and rating of item difficulty.

Results: The total number of recurrent staff members as experts was 25, and the questionnaire response rate was 68%. The quality of the items ranged from good to excellent. None of the items had scenarios or vignettes and were direct. According to the expert's rating, easy items represented 80%, and only two had moderate difficulty (20%).

Only one item out of the two moderate difficulties had the same difficulty index.

The total number of students participating in TBL was 48. The mean mark was 4.8 ± 1.7 out of 10. The KR20 is 0.68. Most items were of moderately difficult (90%) and only one was difficult (10%). The discrimination index of the items ranged from 0.77 0.15. Items with excellent discrimination represented 50% (5), items with good discrimination were 3 (30%), and only one time was poor (10%), and one was none discriminating. The non-functional distractors were 26 (86.7%), and the number of non-functional distractors was four (13.3%). According to distractor analysis, 60% of the items were excellent and 40% were good. A significant correlation ($p=0.4$, $r=0.30$) was found between the difficulty and discrimination indices.

Conclusion: MCQs constructed using AI have good-to-excellent psychometric properties and high quality, measuring higher-order domains. AI allows the construction of many items within a short time.

Title: Meta-motivational Strategies of Medical Students: Emerging Research on the Regulation of Motivational States

Author: Arshia Kanwal, Aamena Akhtar, Ali Mansoor, Adeela Batool, Muneeb Ali Tasleem, Shabana Ali

Institute: Islamic International Medical College, Riphah International University, Islamabad, Pakistan

Abstract:

Background: Metamotivation (as described by Maslow) implies the eagerness demonstrated by a person who wants to achieve beyond the basic needs. The goal of metamotivation is to reach their full potential. For medical students, it is imperative to identify their metamotivational strategies to optimize their learning. The study objectives were to assess the common meta-motivational strategies

among medical students, to compare meta-motivational strategies across various demographic characteristics; and to determine the role of meta-motivational strategies in achieving higher grades.

Methods: This cross-sectional study was conducted at Islamic International Medical College-Trust (IIMC-T) from June to October 2023. A total of 333 participants were recruited using convenience sampling technique. A Google form containing the demographics alongside Metamotivational Strategies in Medical Students Questionnaire (MSMQ) was circulated among medical students. Data was analyzed using SPSS version 26.

Results: Regulation of Value (Factor 1) and Promotional Situational Awareness (Factor 4) emerged as the most prevalent, boasting the highest mean scores of 0.80 ± 0.16 and 0.80 ± 0.15 , respectively. Younger cohort (16-18 years) practiced various strategies when compared to older cohort (p -value < 0.001). Students who achieved 80% and above marks showed markedly higher scores across all factors compared to their peers achieving low grades.

Conclusion: For medical students, identifying and understanding their metamotivational strategies will be imperative to reach their full professional potential.

MeSH terms: meta-motivational strategies, academic performance, medical students

Title: Principles of Contemporary Neurosurgery Teaching of Medical Students

Author: Rovshan Khalilzada

Institute: Azerbaijan Medical University, Baku, Azerbaijan

Abstract:

Aims: Providing a good neurosurgical education to medical university students.

Methods: One of the essential parts of university education is the development of a comprehensive curriculum.

Conducting regular didactic lectures to provide

theoretical knowledge of neurosurgical topics provides students a solid substrate to obtain broader neurosurgical knowledge. Clinical exposures such as clinical rotations and hands-on experience in neurosurgery facilitate mastering of new skills.

We tried to engage students on a case-based learning in analyzing and discussing clinical cases encountered in neurosurgical practice.

Results: Working with the medical university's curriculum committee enabled us to develop a well-structured and integrated neurosurgical curriculum.

Using multimedia aids, such as slides, videos, and interactive presentations, enhanced learning of neurosurgery discipline and made up for its seemingly dull and complicated issues.

Encouraging interaction with patients and neurosurgical faculty fostered practical learning and understanding of patient care.

Regular assessments, including written exams, practical skills evaluations, and oral presentations gave us the opportunity to provide constructive feedback to help students identify areas for improvement and track their progress.

Conclusion: A good neurosurgical education goes beyond the classroom. Encourage students to develop a passion for the field by fostering a culture of inquiry, collaboration, and dedication to patient care.

Title: Learning Environment (LE) and Student Well-Being among Undergraduate Medical Students

Author: Saadia Shahzad

Institute: Shalamar Medical and Dental College, Lahore, Pakistan.

Abstract:

Aims: Medical students' well-being (in terms of quality of life and burnout) is related to LE and it should be measured to make improvements in LE. Objective: to determine the association of LE with Quality of life and burnout in students, in selected public and private medical colleges of Lahore.

Methods: An analytical associational study that explored associations between LE and students' quality of life and burnout; was conducted in 06 randomly selected colleges in Lahore. study participants were undergraduate medical students from first to final-year classes. A sample size of 3375, 50% of the total (6750) was taken as acceptable. single stage cluster sampling was applied. inclusion criteria were all undergraduate medical students and willingness to participate. nursing and allied students were excluded. standardized instruments JHLES for LE, LASA for quality of life, and the single-item linear question were used to measure burnout. descriptive statistics, scores were calculated, correlation, and regression analysis done.

Results: JHLES overall scores range was 28-140, mean 81.17, SD 13.75. low QoL in 3.4%, average in 36.4%, high in 60.2%. for the two components of burnout: emotional exhaustion 51.4% had low burnout and 58.6% had high burnout; depersonalization 18.5% had low and 81.5% had high burnout. a significant correlation ($p < .05$) was found between gender and scores of LE, QoL, and burnout. Logistic regression analysis applied: for QoL significant association ($p < .05$) was found between higher level of class and higher JHLES scores. for burnout, a significant association has been found with gender, higher level of class, and residential status of the student.

Conclusion: Better LE gains better QoL and less burnout in the students. regular LE and burnout measurement should be taken up as policy matter leading to needed corrections and interventions.

Title: Parental Preferences for Group Versus Individual Mode of Speech Therapy Sessions for a typical Children in Pakistan

Authors: Rabia Zubair, Ayesha Mazhar, Ayesha Kamal Butt

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Many children in Pakistan are receiving

speech therapy either in group or individual sessions. There have been no previous studies comparing the outcomes and efficacy of either mode of speech therapy.

Objective: The present study aimed to determine the preferred mode of therapy from parental perspective for their child.

Methods: The study design used for this study was Cross Sectional Survey including N=157 participants. The questionnaire was developed from literature review; Delphi technique was used, and expert reviews were incorporated in two rounds. The following procedure was used for content validation: Preparing a content validation form, selecting a review panel, conducting content validation, reviewing domains and items, Providing scores on each item and Calculation CVI. Both online and onsite data was collected from parents bringing their children to special needs center, private and public hospitals of major four cities of Pakistan i.e., Rawalpindi, Islamabad, Lahore, and Karachi.

Results: In Pakistan individual speech sessions were preferred by parents as 66% parents believed individual sessions are helpful in addressing their child's individual needs, 81% parents reported enhanced language understanding and command following skills of their child in individual mode of sessions. 73% of parents reported language development, improved peer interaction and achievement of goals in lesser duration of time in individual therapy sessions. 84% of parents believed that SLPs can manage individual sessions in a better way. However, 81% of parents believed that group sessions are cost effective, and 73.8% parents believed in group sessions their child feels frustrated and anxious.

Conclusion: In Pakistan the preferred mode of

speech therapy is individual sessions rather than group approach. However, parents believed that group sessions are more cost effective.

Title: Nursing Students Self-reflection on First Clinical Experience A Pilot Study

Authors: Humaira Athar, Farhana Kausar

Institute: Riphah International University, Islamabad, Pakistan

Abstract:

Aims: Reflection in clinical areas is central to nursing students' professional development. It helps the students to identify their challenges and problems. It also enables nursing faculty to help their students and improve their learning in a clinical setting.

Methods: The aim of this study was to investigate the nursing students' reflections on their experiences during clinical practice.

Results: A naturalistic philosophical paradigm using a qualitative methodological approach was followed. Twenty nursing students' reflections were chosen purposefully based on utilizing the Gibbs Model in writing. A thematic analysis was selected for data analysis. Analysis: From the data analysis, four main themes were extracted: Emotional Experience, Motivation, Accountability, and role of faculty and health care professionals.

Conclusion:

Nursing students' reflection in clinical settings is effective on personal and professional levels. It supports students clinical reasoning and promotes deeper thinking and reflection. The students gained insight into their own needs related to learning. Moreover, it helps the nursing faculty to modify the teaching and supervising according to the needs of students.



POSTER PRESENTATIONS

Title: Enhancing Medical Education Using ChatGPT: A Proposal for a Pilot Study

Author: Bahar Graefen, Bahar Graefen

Institute: Chicago State University, United States

Objectives: The objective was to evaluate the feasibility and effectiveness of using ChatGPT in medical education. Specifically, the study aimed to:

- Assess the usability and functionality of ChatGPT as a tool.
- Evaluate the impact of ChatGPT on student engagement and learning outcomes.
- Identify potential barriers to implementing ChatGPT.

Methods: This study involved a randomized controlled trial with two groups of medical students. During the study, the intervention group (fifteen students) used ChatGPT as a supplementary tool for learning, while the control group (fifteen students) received traditional classroom instruction. Both groups received the same course material and assessments, and the study was conducted over a period of 12 weeks. The intervention group had access to ChatGPT. During the study, the control group received traditional classroom instruction without access to ChatGPT. Data was collected through pre- and post-intervention assessments, which included a knowledge test.

Results: The results of the pre-intervention assessment showed that only 32% of the control group passed, while 30% of the intervention group passed. After the intervention period, the control group's passing rate improved to 76%, while the intervention group's passing rate improved to 88%.

- ChatGPT is a feasible and functional tool for

medical education.

- The results of the study showed that the use of ChatGPT led to improved student engagement and learning outcomes.

Conclusion: The study identified ways in which this technology can be used to enhance the education and training of medical students, ultimately leading to better patient outcomes.

Title: Challenges faced by health professions educationists due to structural variation in Department of Medical Education

Author: Shaista Noor Qureshi

Institute: Riphah International University, Islamabad, Pakistan

Objectives: Department of medical education (DME) setups of medical colleges have structural variations. In most cases, one faculty member is working along with serving in the parent department. There is a need to explore the variation in structure of the department of medical education in relation to challenges faced by DME faculty.

Methods: It was an exploratory qualitative study design. The ethical approval was given by the Ethical Review Committee of Riphah International University. Nonprobability purposive sampling was done. The sample size was 14, comprising of Head of Departments and faculty of DME from three provinces of Pakistan. It took 6 months for completion. The interview guide was developed by the researcher, validated by the Health Professions Educationists. Scheduled interviews were conducted after getting consent and recorded through ZOOM software. The transcription was done by the researcher. The information was shared with the participant for member checking. Coding of data and thematic analysis were done.

Results: The current setups of DME show variation in hierarchical structure, they are having minimum 1 member or maximum of 5

members. The number of faculty members, support staff and the hierarchy of DME is left completely to the discretion of the medical college management. The staff requirement (minimum) based on job specification and description lacks regulation. The data analysis resulted in 8 themes, 22 sub-themes and 54 codes. The challenges faced by DME faculty due to structural variation are lack of trained, experienced, and qualified faculty, support staff, infrastructure, funds, authority and autonomy, resistance from faculty, administration, and affiliated university.

Conclusion: Trained faculty, protected time for research, faculty development programs, proper organizational structure and provision of funds may facilitate DME faculty to achieve basic standards by PM & DC effectively.

Title: Predictors of Nomophobia and Its Association with Personality Traits: A Cross-Sectional Survey Among Undergraduates

Author: Arshia Kanwal , Muhammad Hamza Shoaib, Mahnoor Tariq, Hafsa Shamim

Institute: Islamic International Medical College, Rawalpindi, Pakistan

Introduction: Mobile phones have become an essential part of modern life and make our lives easier. However, for some people, they are a source of stress. Nomophobia is a psychological condition in which a person experiences fear or anxiety if they do not have their mobile phone.

Objectives:

- Determine the prevalence and level of nomophobia in youth.
- Comparison of nomophobia scores with demographic characteristics.
- Correlation of nomophobia with personality traits and the predictive influence of personality traits on nomophobia.

Methods: This descriptive, cross-sectional study was carried out in various educational

departments of Riphah International University from February 2022 to October 2022 with a sample size of 784. Two validated questionnaires, the 20-item Nomophobia Questionnaire (NMP-Q) and the 44-item Big Five Inventory (BFI) were circulated via Google form and analyzed using SPSS version 26.

Results: The prevalence of nomophobia was 95.8% among students. 7.0% of students had a severe level of nomophobia, 53.1% had moderate nomophobia, and 35.7% of students had mild nomophobia. There was no significant difference in the nomophobia scores (NMP-Q) of male and female. The age group 21-23 years was observed to have the highest nomophobia scores. Neuroticism and openness scores were directly proportional with nomophobia scores ($p < 0.01$). The results showed that neuroticism ($r = 0.295$; $t = 8.055$, $p < 0.001$), extraversion ($r = 0.076$; $t = 2.127$, $p = 0.03$) and openness ($r = 0.117$; $t = 3.07$, $p = 0.002$) positively and significantly predicts nomophobia.

Conclusion: Nomophobia is a prevalent issue among youth affecting most participants moderately and severely. Personality traits of a person, particularly neuroticism, affect nomophobia score. Neuroticism is also the most significant predictor of nomophobia. It is concluded that nomophobia is adversely affecting the mental health of the youth. Further research and multicentric studies are required to investigate the psychological aspects and solutions for nomophobia.

Title: Medical Students' Attitudes towards Implementation of National Licensing Exam (NLE) - A Multi-Institutional Exploratory Study

Author: Saima Bashir

Institute: Gomal Medical College, D.I. Khan, Pakistan

Objectives: The National licensing exam (NLE) has been recently introduced in Pakistan. A lot of resistance was faced to implement the exam

from medical students. The aim of the study was to explore the opinion and feelings of medical students regarding the significance of NLE as stakeholders.

Methods: A qualitative exploratory study was conducted. One to one in depth interviews were carried out in person and through zoom meetings with 12 medical students from two different medical colleges in Pakistan. The discussions were audio recorded and transcribed verbatim. The data were analyzed using NVivo V2. The data was coded into nodes and daughter nodes. The nodes were analyzed, and five main themes and 16 subthemes were identified.

Results: The students were familiar with the concept of licensing exam nationally and internationally. They realized the importance of conducting licensing exams in the country. They believed that NLE is a good standardization tool for assessing teaching standards and competence of medical graduates, however, social accountability cannot be assessed through NLE. The students had mixed opinions regarding acceptance of exam as means of license to practice. Most students expressed dissatisfaction with idea of having to sit through another exam after being assessed in professional exams. Students insisted on improving the health system instead of burden of extra exams.

Conclusion: Medical institutions across the country should focus on curricula to develop clinical skills and health regulatory bodies in Pakistan. Opinions of deans, faculty, students, and policy makers to be included.

Title: The Roles of The Professor of Surgery: Opinions of Students and Teachers

Author: Carlos Eli Piccinato, Piccinato CE, Rodrigues MLV, Moralles TD, Joviliano EE, Troncon LEA

Institute: Ribeirao Preto Medical School, Brazil

Objective: As proposed in several reports, the

identification of the expected teacher roles may be useful for planning teacher training and faculty development activities. This study aimed at determining the perceptions of both medical students and General Surgery teachers on the desired roles of a good teacher.

Methods: Year 3 students (N=95) enrolled in a curricular module on "Introduction to Surgical skills" were invited to answer to a structured questionnaire on the perceived importance (5-point scale) of 13 teacher's roles. 85/95 students answered the questionnaire before attending the course, while 91/95 answered it after completing the module activities. 23 out of the 25 teachers involved in the module also answered the same questionnaire. The average values of the importance attributed to each teacher role by the students, before and after the course, and by the teachers were compared (Fishert and Mann-Whitney tests; significance set at $p > 0.05$).

Results: Students attributed significantly more value than teachers to the roles of "information provider", "clinical tutor", "manager" and "active member of the academic community", while teachers attributed significantly more value than students to the roles of "teaching planner" and "student evaluator". Many of the proposed roles received lower scores from both students and teachers. Participation in the curricular module was not associated to significant changes in the value attributed by students to any of the proposed roles.

Conclusion: Roles recognized as relevant were not much valued by teachers, which points to the need of faculty development activities to foster awareness of the diversity and relevance of teacher's roles.

Title: Influence of Role Models on Career Choice

Author: Maria de Lourdes, Silva RFB, Piccinato CE, Colares MFA, Paula JS, Furtado JM, Troncon

LEA, Rodrigues MLV, Maria de Lourdes Veronese Rodrigues

Institute: Ribeirao Preto Medical School, USP, Brazil

Objective: The influence of health professionals as role models in the choice of medicine as a career is widely recognized. We investigated whether this influence is affected by student gender and verified the most influential of the characteristics of the role model in the choice of medicine as a career.

Methods: Brazilian medical students (N=102; 46 male; age range: 18-39 years) were invited to answer to a structured electronic questionnaire containing demography items, including on age and gender, and an index question on whether the personal choice of the medical course was influenced by a health professional role model. Positive answers elicited an invitation to mark (5-point scale) the perceived importance of each of 16 characteristics of the role model that was most influential in the choice. They were also asked to cite other positive attributes of health professionals that could be regarded as clearly positive.

Results: Nearly two thirds of the participants (65.7%) reported they had a role model influencing their career choice, with no difference between male and female students (67.4% vs. 64.3%). The most valued characteristics of their models were explicit concern with patients, good physician-patient relationship and respect for other members of the healthcare team. The same attributes, plus integrity and ethical behavior, were also the most cited positive characteristics of health professionals.

Conclusion: Gender does not affect the influence of health professionals on students who chose the medical course. Fostering faculty awareness on the influential effect of positive humanistic attributes is needed.

Title: Impact of Online Anatomy Laboratory Video Supplementation on Students' Performance in Gross Anatomy Assessment

Author: Halima Mohammed Albalushi

Institute: Sultan Qaboos University, OMAN

Objective: There are mixed reports on the effectiveness of online gross anatomy videos on medical students' academic performance. Additionally, there is a paucity of research on the impact of gross practical videos on medical students' performance. Hence, we aimed to study the impact of practical video supplementation on students' performance in

Methods: In the present retrospective cross-sectional study, two different cohorts of medical students were exposed to different teaching methods for learning gross anatomy practical. The two cohorts learned practical gross anatomy face-to-face in the lab, but one cohort was supplemented with online video demonstrations. An Independent T-test was used to evaluate the differences in students' objective structured practical exam (OSPE) performances of the two cohorts. The gender differences in OSPE performances were also analyzed using the one-way ANOVA test.

Results: The mean score in the OSPE for the 2021 cohort was 17.35 ± 0.2 , while the mean score for 2019 was 16.44 ± 0.15 . The mean score in the OSPE was significantly higher among the cohort that received hybrid practical teaching than the cohort that only received traditional teaching ($P = 0.001$).

Conclusion: The supplementation of gross anatomy practical videos improves students' performance in OSPE. The effectiveness of video supplementation observed in the present study would emphasize the feasibility of teaching anatomy online.

Title: Resilience and Academic Performance: Exploring the Link in Dental Students. A Correlational Study

Author: Fizzah Ali, Rehan Ahmed Khan,

Mehwish Arooj

Institute: Lahore Medical & Dental College, Lahore, Pakistan

Objective: Resilience refers to the capacity and capability to recover from stress. Students' motivation and academic performance are affected when working in demanding situations and cause occupational distress. The objective is to find out the correlation between the resilience level of dental students and its effects on their academic performance.

Methods: This correlational research design was carried out on 2nd, 3rd, and final-year dental students (preclinical & clinical years). A total of 196 dental students were enrolled. Informed consent and demographic details were taken from all the students. All the data was collected on a pre-designed proforma. Academic resilience was judged by using the academic resilience scale (ARS-30). All the collected data was entered and analyzed on SPSS. The correlation between resilience and academic performance was done by applying bivariate Pearson correlation using SPSS 23. Confidentiality of data was maintained.

Results: The mean age of the students was 21.49 ± 1.39 years, among 196 dental students from different prof, 132(67.35%) were females and 64(32.65%) were male. 86(43.88%) were from 2nd year prof, 50(25.51%) were from 3rd year and 60(30.61%) were from final year prof. The value of Cronbach's alpha of the ARS-30 was 0.714. The mean total ARS-30 scores of the students were 74.19 ± 8.85 . There is a strong positive correlation found between the academic performance and academic resilience of dental students i.e., $r=0.774$.

Conclusion: Academic resilience places the construct of resilience in an educational context and indicates a higher probability of achieving educational success in the face of adversity. Institutions should develop interventions.

Title: Technology-Enhanced Peer-Role Play: An Effective Method of Innovative Clinical Learning

Author: Mohammad Arshad Ikram

Institute: International Medical University, Malaysia

Objective: International Medical University introduced a virtual platform for teaching when access to the clinical environment was limited. Clinical cases were prepared using the latest e-learning tools such as Articulate Storyline 360 or Vyond. The objective was to empower students for flexible participation whereby students may choose to attend face-to-face in-person.

Methods: A simulated case of a traumatic hip dislocation was prepared with three (3) fourth-year medical students. Two acted as attending emergency doctors and one played the role of a patient involved in a motor vehicle accident. A complete interactive virtual clinical case with video-based content, and quizzes on the anatomy of the hip is available for students to access via the IMU e-Learning portal for Self-Directed Learning.

Results: An online survey to acquire the perception of students for PRP was conducted. A total of 141 students participated in the survey. The questionnaire showed good internal consistency (Cronbach alpha = 0.921). 99.3% of students perceived PRP as a good tool to enhance clinical learning that helped them prepare for the real clinical environment. 95% of students appreciated the fact that they were able to revisit the case at their convenience.

Conclusion: Student PRP is an innovative form of virtual teaching that provides a positive learning experience, insights into case-based learning and fosters critical thinking.

Title: Observations of the Observed Structured Clinical Exam.

Author: Hajra Talat, Tayyaba Azhar

Institute: Fatima Memorial Hospital Collage of

Medicine & Dentistry, Pakistan

Introduction: The traditional tools to evaluate clinical skills are short & long case evaluations, viva and MCQs etc. All these tools have an inherent risk of subjectivity and to overcome this Harden introduced objective structured clinical examinations (OSCE). OSCE has now become a standard tool of assessment in medical schools.

Methods: A cross-sectional study was conducted on students and examiners undertaking OSCE. The entire OSCE loop was 45 stations. These stations assessed students' history taking, management and communication skills etc.

Results: Most of the items assessing the attributes and structure of OSCE received positive responses of agreement. 72.6% & 76% of students agreed that OSCE assessed a wide range of knowledge and clinical skills respectively. 73.6% agreed that OSCE revealed their strengths and weaknesses. On the other hand, 72% considered OSCE to be stressful. 71% of students reported that OSCE was structured and sequenced, and 64.8% students said time of station was adequate. Regarding the perception on the validity of OSCE, 73.9% agreed with OSCE as a good measure of competency and 63.6 % agreed that it truly measures clinical skills.

Conclusion: In spite of the positive perception, this study also highlighted a few weak areas. Students and faculty reported that mock sessions should be introduced.

Title: Using Practical Skills for a better Understanding of the Subject

Author: Gulnara Kerimzade, Sabina Shadlinskaya, Nariman Movsumov

Institute: Azerbaijan Medical University, Azerbaijan

Objective: The staff of the Department of Human Anatomy and Medical Terminology of

the Azerbaijan Medical University uses diverse innovative teaching methods. Among the most preferred are computer presentations, organizational sessions, and testing programs. One of the forms of introducing methods into teaching that stimulate students' increased interest in the subject is the use of the corpse preparation and dissection in the educational process. Aim of the study. The purpose of the study is to evaluate the impact of involving students in the practical use of corpse preparations on their academic scores.

Methods: This study was conducted from September 2022 to May 2023. Two groups of students of the medical faculty of the Azerbaijan Medical University were used. The students were given information about the study. The first group included 35 students, where along with the lectures, the students also participated in the preparation. Together with the students, we separated the nerve trunk. This helped them in a further deeper understanding of the subject. The second group included 33 (control group) students, where, along with lectures, students were taught with the help of computer presentations.

Results: In this study, we aimed to evaluate the benefits of including a skills training programmed in the anatomy teaching. Among the students of group, I, 28 (80%) students received the highest score on the exam. In group II, which was taught using a computer presentation, 18 students (55%) received the maximum score on the exam.

Conclusion: The data obtained show that the results of the exam of students of groups. I and II differ significantly from each other. The results show that students' participation in preparation can successfully improve their academic performance and achieve higher exam scores.

Title: The Comparison of Case-Based Teaching at the Bedside and Traditional Lecture-Based teaching for Pediatric Students.

Author: Rauf Baylarov, Nushaba Panakhova, Afag Akhundova

Institute: Pediatrics Department of Azerbaijan Medical University, Azerbaijan

Objective: In connection to the transition to credit technology of education, some topics of independent work of students with a teacher required the improvement and application of innovative learning technologies. Since in the credit technology of education a lot of time is devoted to independent study of the subject by students, the innovative learning technology based on a clinical case (Case Based Learning - CBL) is one of the most suitable. Aim of the study. The study objective was to investigate a more successful strategy for improving educational results than the conventional lecture-based learning (LBL) model by developing a creative, comprehensive, and case-based learning (CBL) model.

Methods: This study was conducted from September 2022 to May 2023 in a Pediatric department ward of the Therapeutic Clinic of the Azerbaijan Medical University with pediatric students for the evaluation of the efficacy of two teaching methods: lecture-based learning (LBL) and case-based learning (CBL) teaching at the bedside. According to the applied teaching methodology, 36 students were divided into 2 groups: LBL (18 students) and CBL (18 students) groups. When choosing cases, we adhered to the main characteristics that meet the requirements of interactive training in CBL: connect theory and practice, develop decision-making and problem-solving skills; increase the level of critical thinking; stimulate communication skills and team learning, understand the complexity of real situations. Teaching staff supervised each group. We conducted a pretest and post-test in

a multiple-choice format in two levels with students according to the topic. Post-test was taken from learners in two phases: first, immediately after the completion of the four CBL and LBL sessions (posttest 1), and second, 4 weeks after the first post-test (posttest 2).

Results: Comparison of pre-tests and post-tests showed better problem solving in students after case-based teaching at the bedside: learners gained 82% better scores for practical ability after bedside teaching and 67% better scores after the lecture.

Conclusion: The findings demonstrate that the clinical practice abilities of the CBL group and the control group differ significantly from one another. The findings show that the CBL teaching approach can successfully raise medical students' success rates and advance their clinical practice skills.

Title: Medical Education to Rural Girl in Azerbaijan Realities

Author: Jafarova AR, Ackhmedov SI, Abbasova EM

Institute: Azerbaijan Medical University Baku, Azerbaijan

Objectives: The education of girls from rural areas has always been a problem of society and the nation. Higher education among rural residents is more difficult to obtain due to the difficult and long preparation for entrance exams, the popularity of early marriages in rural areas, the reluctance of parents to send girls to study in the city, gender inequality and traditional prohibitions. This serious problem exists in many countries, including ours. We decided to research the number of girls students from rural areas in the Azerbaijan Medical University.

Methods: We were also interested in the performance of this group of students to understand the problems of education and preparation for entering universities in rural areas in general among young people and

among girls. We determined the number of rural girls in first year Dentistry students.

Results: The total number of students was 70, out of which 30 (42.9%) were male, and 40 (57.1%) were female. The number of rural girls was 7 (10% of the total and 17.5% of females). The average score of the rural girls upon admission was 601 points (the average score for admission this year was 563.2). The performance of girls from rural areas was also found to be high, they received the highest scores in 44% of cases. Considering that the ratio of rural and urban population in Azerbaijan is approximately equal, the number of girls from rural areas is small and amounts to only 10%.

Conclusion: Rural girls are good students, and we hope that the number of girls from these areas will grow every year and will be more significant in number among students of the Faculty of Dentistry of AMU and not only in our university, but also in all Azerbaijan Universities. We believe that it is necessary to pay attention to higher education, including medical to girls from rural areas, for the further good development of the country and society.

Title: Preparation for medical school; perceptions of medical students at Sultan Qaboos University

Author: Ruqaiya Al Jabri, Esraa Al Qayoudhi

Institute: Sultan Qaboos University, Oman

Objective: The first year of medical school is a critical period. The objective of this study was to investigate the difficulties faced by medical students at Sultan Qaboos University in Oman. The study also aimed to identify areas that can be improved to enhance student performance and coping in later years.

Methods: A survey was conducted among 634 medical students from October 2022 to February 2023. The questionnaire was divided into five parts: demographic information, English language level, study skills, self-study strategies, and progression of learning. It was

reviewed by two senior academic staff from the department and piloted on 10 medical students. Then, it was distributed online through the university email. The responses were collected and data was analyzed in The Statistical Package for the Social Sciences (SPSS) program version 28.0. Descriptive results are presented using tables and graphs. The median of the 5-point Likert scale responses was obtained.

Results: Students generally perceived their English level as suitable for the medical program. However, they did not find that high school English adequately prepared them for university-level English. The median responses for current study skills and those obtained during high school were neutral. The majority of students agreed that school science subjects prepared them for university science courses. More than two-thirds of the students agreed that they have an effective self-study strategy. Analysis of open-ended questions revealed themes such as: changing the language of teaching science in high school, focusing more on skills, and improving English for medicine courses.

Conclusion: The findings of this study have implications for medical educators and policymakers. These include ensuring high school English proficiency, providing study skills training, and addressing high school science teaching concerns.

Title: Perception and Attitude of Medical and Health Sciences Students toward Interprofessional Education: A Systematic Review

Authors: Shukri Adam, Shahnaz Usman, Sneha Pitre

Institute: RAK Medical and Health Sciences, United Arab Emirates

Abstract:

Objectives: The 21st century has more complex healthcare situations with multiple comorbidities, which requires an

interprofessional approach to optimize the healthcare outcome. WHO has also emphasized the need for Interprofessional collaboration in managing multiple healthcare issues. The purpose of this review was to assess the Perception and attitude of medical and health's sciences students towards interprofessional education.

Methods: A systematic review was conducted by using PubMed, and CINHALL for studies published from 2018- 2023 in English.

Results: Out of 260 articles published on the perception and attitude of students from healthcare professions toward interprofessional education, only 46 were found to be eligible for the systematic review. Various methods in the form of focus group interviews, workshops, debates, and standard tools were used to assess the perceptions and attitudes of Medical and Health Sciences students toward Interprofessional Education. Overall attitude and perception were reported as positive.

Conclusion:

Positive attitudes and perceptions toward IPE play a significant role in the overall development of students toward achieving the goal of ensuring quality care to the community.

Title: Comparing the Efficacy of Virtual Reality Versus Traditional Method for Anatomy Learning among Students of Physical Therapy

Author: Madiha Anees

Institute: Rehman Medical College, Peshawar, Pakistan

Abstract:

Objectives: Physical therapist embracing the role of movement expert need to have

adequate knowledge of anatomy, physiology, and motor control in their curriculum. Anatomy is a major subject taught in the early foundation years and is now taught with various technological means.

Methods: This cross-sectional study was conducted on undergraduate physical therapy students at Rehman College of rehabilitation sciences over a period of 1 month. A total of 142 students of 1st, 2nd and 3rd year were included in the study through universal sampling and after taking the approval from the principal of the college the participants were approached. The purpose of the study was explained and informed consent was taken. The 23-item questionnaire was distributed among participants and the data was taken. Data was analyzed using SPSS version 22.

Results: The response rate was 87.3 % out of which 72.6% were females while 24.7% were males having mean age $\pm 20.2 \pm 1.37$ and majorly 38.1% students were from 1st year. On average 34.43% and 39.82% of students agree regarding the efficacy of learning through virtual method and traditional method of anatomy respectively. Between the groups there was no significance regarding which method of learning was better for students (p value = 0.5) and no association was found with independent variables (age, gender, and year of study).

Conclusion: The use of VR is as effective as the traditional model method of learning anatomy however, professionally trained faculty could play a better role in understanding anatomy learning.



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- Study Design
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