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Title: Assessment of Student Perceptions of Respiratory Care Program using the University of Dammam Respiratory Care Educational Environment Measure (UDREEM)
Title: Do Students of Vocational School of Health Sciences Ready for Interprofessional Education in Turkey?
Title: Effectiveness of the use of hearing aid vs cochlear implant for children with profound deafness
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PRE CONFERENCE COURSES

ESME Course 1 Essential Skills in Medical Education
Facilitators: Ronald Harden, John Dent, Patricia Mary Lilley
Date: Oct 16, 2015
Timings: 8:30 - 17:00 hrs
Abstract:
With the increasing professionalisation of medical education, the need for doctors and other healthcare professionals to have training in teaching is widely recognized. Whilst many institutions worldwide offer Diploma and Masters Courses in medical education, there is a lack of accredited basic level courses. The ESME Programme has been designed to meet the need for an entry level teaching qualification and will be of particular interest to teachers who are engaging with medical education for the first time. It will also be valuable for more experienced teachers who have been given some new responsibilities or assignment relating to teaching or assessment, or who wish to have an introduction to the theory underpinning the practice of teaching. It has been designed in the context that all doctors in any branch of medicine or field of practice are likely to have some teaching responsibilities for undergraduates, postgraduates, peers, other healthcare workers or patients. ESME’s novel course structure combines a purpose-built course on teaching with an international medical education Conference. ESME is accredited by AMEE and approved by an international Advisory Board.

ESCEL Course 2 Essential Skills in Computer Enhanced Learning
Facilitators: John Sanders
Date: Oct 16, 2015
Timings: 8:30 - 17:00 hrs
Abstract:
Aim of the ESCEL course: To equip medical educators with the knowledge and skills to develop effective educational interventions using technology
By the end of the course, participants will be able to:
- Critically understand and apply key educational principles to the design and delivery of effective educational interventions using technology
- Align the needs of the learner, the content, the instructional approach, the technology and the context
- Evaluate and apply usability testing for educational interventions using technology

Session 1
- The evidence base for the use of technology to support teaching and learning
- The importance of alignment of the learner, the content, the instructional approach, the technology and the context
- The DDD-E model

Session 2
- The Decide phase
- The Design phase
- Using educational theory for effective teaching and learning with technology
- The Design and Delivery phases
- Aligning the potential of a variety of different technologies for effective teaching and learning

Session 3
- The Evaluation phase
- The importance of usability testing
- Widespread use of the new approach for teaching and learning

Session 4
- Widespread use of the new approach for teaching and learning
- Evaluation and Research of the use of technology for teaching and learning
- Review of learning
PRE CONFERENCE WORKSHOPS

PCW 01: Fundamentals of Educational Leadership Skills to Lead Change in Health Care
Facilitator: Brownell Anderson
Date: Oct 15, 2015
Timings: 8:30 - 12:00 hrs
Abstract:
Background: Much has been written about the qualities of effective leadership and the qualities of the effective leader apply equally well in medical education as they do in business. In this interactive workshop, participants will:
- Consider the necessary elements in an institutional climate to foster thoughtful and creative attention to medical education.
- Identify qualities of effective leadership for the continuous improvement of the educational programs of the institution.
Learning Outcome: Participants will have the opportunity to consider their own leadership qualities, how they relate to the institutional culture and identify opportunities for leadership in medical education at their institution.

PCW 02: Simulation Based Education in Healthcare
Facilitator: Melih Elcin, Mehmet Emin Aksoy
Date: Oct 15, 2015
Timings: 8:30 - 12:00 hrs
Abstract:
Introduction: The need for using simulation at all levels of medical education, the variety of simulation modalities and the evidence of their effectiveness in achieving many technical and non-technical skills have been one of the major concerns in the recent years. Many institutions in the health sciences education are implementing simulation activities to their curricula. Some modalities are cheaper while some are really expensive. Some simulation modalities require special facilities. The faculty members who are about to make decisions on the type and the content of simulation for their curriculum may have many questions. They may have some hesitations. They may need guidance. Some of them have been using simulation for many years, and they want to improve their program. Learning and encouragement will take place while listening, presenting, sharing, and discussing the methodologies and experiences.

PCW 03: Feedback and Reflection in Medical Education: Completing the Loop
Facilitator: Deborah Murdoch Eaton, John Dent
Date: Oct 15, 2015
Timings: 13:00 - 16:30 hrs
Abstract:
Content: Surveys of most students will reveal a common theme of student dissatisfaction with feedback. There is often a discrepancy between student and staff perceptions of when and how feedback has been given. The workshop will explore reasons for giving feedback, effective methods to improve students’ understanding of feedback, and strategies to facilitate students’ abilities to “feed forward”.
Learning outcomes: By the end of the session, course participants will be able to:
- Describe the key features of good and effective feedback
- Explore students’ views and perceptions of received feedback
- Considered methods to enhance understanding, recognition and usage of feedback
- Practiced and developed some skills in getting and receiving feedback
- Shared good practice and successes

PCW 04: E.Time- Electronic Tools in Medical Education
Facilitator: Rehan Ahmad Khan, Saad Naeem Zafar
Date: Oct 15, 2015
Timings: 13:00 - 16:30 hrs
Abstract:
Background: Emerging technology in software
has equally influenced medical education. Paper less educational environment requires know how of latest softwares and possible links between them to create an educational environment based on E-learning.

**Intended outcomes:** To apply instructional study design in E-learning to create a module to appreciate the dynamics of important and widely used educational softwares

**Structure:** Small group discussions and hand on activity. Participants are required to bring their laptops to the course.

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**Abstract:**

**Background:** There is increasing recognition that medical schools have a responsibility to train graduates with the required competencies and attitudes to address health inequities and respond to priority health needs. Eight health professional schools with a focus on the underserved and striving towards greater social accountability founded the Training for Health Equity Network (THEnet) in 2008 to build evidence to support effective and credible change. THEnet determined that current tools to assess progress of institutions towards social accountability were not practical enough. The schools jointly developed a framework built on Boelen and Woollard’s (2009) Conceptualisation, Production and Usability model to develop THEnet’s Framework for Socially Accountable Health Professional Education. It identifies key factors affecting a school’s ability to positively influence health outcomes and health systems performance, and develops ways to measure them across institutions and contexts. It was successfully tested at THEnet schools. The workshop’s purpose is to present the framework and engage potential partners. By partnering THEnet seeks to strengthen the framework and the evidence base on social accountability by harmonizing data collection and analysis.

**Learning Outcome:** By participating in the workshop, participants will:

1. understand the key components of the evaluation framework and its relevance to improving their school’s ability to positively influence health and system outcomes
2. learn how participant’s institution could adapt the framework to their own context

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**PCW 06: Practical Approach to Assessment of Medical Competence and Performance**

**Facilitator:** Charlotte Ringsted
**Date:** Oct 16, 2015
**Timings:** 8:30 - 12:00 hrs

**Abstract:**

Prior research and experience inform that when designing assessment programs the variety of characteristics, traditions, and cultures across programs and specialties must be appreciated. Including a wide group of practitioners, teachers, and learners in the process of designing the program is highly recommendable. The perceived value of an assessment program relies heavily on the meaningfulness to the users. This includes three inter-related factors: the link to patient safety and independent practice rather than end-of-training assessment; the benefits to educators and learners in the educational process rather than mere documentation of competence; and the attitude and rigor of assessment practice. Finally, the assessment program and the methods used must be tailored to learners’ professional development and include a challenge to the learning. Hence, a one-fits-all-at-all-times model is not viable.

On this background the participants of this workshop will be offered a model that aims to be of help in aligning the competency frameworks with 1) level of learner experience and professional development (the persons); 2) the manifold of activities the learner is expected to be able to perform (the tasks); and 3) the characteristics of the setting in which activities are taking place (the context). A variety of assessment methods and formats will be presented and pros and cons regarding their use will be discussed with participants.

**Learning Outcome:** A framework for compiling an assessment program.

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**PCW 07: Practical Curriculum Reforms: Issues Challenges Opportunities**

**Facilitator:** Matthew CE Gwee
**Date:** Oct 16, 2015
**Timings:** 13:00 - 16:30 hrs

**Abstract:**

A curriculum is essentially a learning system design (or educational blueprint) consisting of key inter-dependent educational elements systematically organized into a course programme for the education of students. Thus, the inter-dependent educational elements in a given curriculum exist together in a dynamic equilibrium.
In any intended curriculum reform, there is a need to change one or more of the inter-dependent educational elements; consequently, this is often accompanied by a shift in the state of equilibrium of the inter-dependent educational elements. Thus, a curriculum reform essentially represents a major change process which needs to be handled well to ensure success, i.e. to ensure sustainability of the reform.

Participants will identify and engage in discussing the issues, challenges and opportunities associated with the change process in a curriculum reform. It is useful for participants attending this workshop to have knowledge of the basic steps involved in curriculum planning and development.

PCW 08: Aligning the Medical School Curriculum with WFME Standards

Facilitator: Hossam Hamdy, Iskander Sayek
Date: Oct 16, 2015
Timings: 13:00 - 16:30 hrs
Abstract:
Background: Since the publication of the WFME standards in 2004, many medical schools have used to conduct their self-study based on these standards. It became part of the quality assurance and accreditation process of many programs. The alignment between the WFME standards and the curriculum is frequently a problem. This is mainly due to difficulty in translating the meanings in the standards with the curriculum development, implementation and evaluation processes. This creates a gap between the “curriculum on paper”, “curriculum in action”, “learned curriculum” and “used curriculum”. Another problem is the quality of the evidence basic or quality level. The division between the two is frequently blurred.

Learning Outcomes: By the end of this workshop the participant will be able to:
1. Reflects from their personal experience or the provided examples, on problems encountered in alignment between the standards and the curriculum. In the workshop we will focus mainly on three curriculum related areas of WFME standards:
   - Mission and objectives
   - Educational program
   - Student assessment
2. Recognize from experiences while conducting self-evaluation, why a response to a standard can be considered acceptable and reflects the annotations and whether it “met the standard” or “did not meet the standard”.

PCW 09: Using Emotional Intelligence to Lead the Change in Medical Education

Facilitator: Fadil Citaku
Date: Oct 15, 2015
Timings: 08:30 - 12:00 hrs
Abstract:
There is evidence in the change management literature identifying the role of emotional intelligence in a change context. For instance, Goleman (1995) perceives that emotional intelligence competencies such as social skills, social awareness, self-management and social management, are job skills that can be learned and has become important construct in the change process. Gardner & Stough (2002) asserted that emotionally intelligent employees are thought to be happier and more committed to their organization, achieve greater success (Miller, 1999) perform better in the workplace (Goleman, 1988), take advantage of and use positive decision making and able to instill a sense of entusiasmus, trust and co-operation in other employees through interpersonal relationships (George, 2000). Besides, research also revealed that people with high levels of EI experience more career success (Dulewics and Higgs, 1998), feel less job insecurity (Jordan et al, 2002), lead more effectively (Cooper and Sawaf, 1997) are more adaptable to stressful events (Nikolaou and Tsaousis, 2002) and better coping strategies (Baron et al, 2000) than those with low EI.

In this workshop participants will learn how using the emotional intelligence can support leading the change in Medical Education.

Learning Outcomes:
- Recognize the difference between managing and leading change
- Understand the three key stages of change and the leadership elements which support each stage
- Understand your own reaction to change and how this affects your ability to lead others through change
- Learn about resistance to change, its importance and how to overcome and manage it successfully
- An understanding of the role of leadership and emotional intelligence within change
- How to recognize and understand the five competencies for building emotional intelligence
- Learn practical ways in which leadership behaviors, using emotional intelligence can embed and support sustained change
PCW 10: Team-Based Learning among Multicultural Medical Students

Facilitator: Gulam Saidunnisa Begum, Anshoo Agarwal

Date: Oct 16, 2015
Timings: 1300 - 1630 hrs

Abstract:
Highest quality health care is delivered not by individuals, but by teams. Most of health care curricula have carefully focused on creating knowledgeable and skilled professionals but generally have not emphasized training their graduates in team building skills. At RAK Medical Health Sciences University, team building training is blended in the curriculum in the form of Team-based learning (TBL), so as to acquire team building skills to enrich their health care practice in any setting and make them a globally competent health care professional.

TBL is a well-defined instructional strategy that is being employed increasingly in medical education. Students are held responsible for both individual and team learning. The Team-Based Learning process is aimed at teaching students to apply knowledge.

Intended learning outcomes: By the end of the workshop participants are expected to be able to:

- Understand the best practices related to effective designing and implementation of TBL in health care professional education. Which include 6 core elements as follows:
  - Steps In developing a TBL exercises (Working Backwards).
  - Readiness assurance process
  - The 4 “s” structure for developing team application exercises (significant problem, same problem, specific answer choice, simultaneous reporting).
  - Team formation (groups must be properly formed and managed and students must be made accountable.)
  - Immediate feedback.
  - Peer evaluation.

Types of activities and form of interaction proposed:
The workshop will combine brief presentations that introduce the fundamental principles about best practices related to effective designing and implementation of TBL in health care professional education.

- Group formation and group dynamics along with Bruce Tuckman model of team development.

- Small group activity: The Marshmallow Challenge is a remarkably fun and instructive design exercise that encourages teams to experience simple but profound lessons in collaboration, innovation and creativity. This teaches transforming a group of diverse individuals into a high-performance team. Participants will develop their own TBL guided by experienced facilitators.
CW01: Learning Outcomes, Competencies, Milestones and EPA's: Choosing the Right Approach

Facilitator: Rehan Ahmad Khan, Fareesa Waqar, Fahd Mudasar Hameed
Date: Oct 17, 2015
Timings: 16:00 - 17:30 hrs
Abstract:
Background: The eventual outcome of a curriculum is guided by defining the aims, goals and objectives of the process. This can be done through various methods. However choosing the right method is an arduous task.
Intended outcomes: Develop learning outcomes, competencies, milestones and EPA’s: Choosing the right approach.

CW02: Standard Setting and Item Analysis

Facilitator: Junaid Sarfaraz
Date: Oct 17, 2015
Time: 16:00 - 17:30 hrs
Abstract:
Background and Aims: Most commonly used test items include various forms of Multiple Choice Questions, Structured Answer Questions (SEQs), Long Essay Questions (LEQs), Objective Structured Clinical Examinations (OSCEs) and study cases. However, very commonly, these items are prepared and used overlapping content coverage and their construction also leaves a lot to be desired. This commonly results in decreased validity and reliability of Examination. Standard setting in examination is commonly overlooked and post test item is frequently not undertaken. The workshop will address these issues and make the participants aware of constructing, analyzing and utilizing these test items.
Learning Outcomes: Constructing valid and reliable test items Standard setting in examination post test item analysis.

CW03: Tips in Developing Effective Faculty Development Program

Facilitators: Rahela Yasmeen, Fareesa Waqar
Date: Oct 18, 2015
Time: 11:00 - 12:30 hrs
Abstract:
Due to paradigm shift in educational strategies in medical education, faculty development has become an increasingly important component of medical education, has a critical role to play in promoting academic excellence and is one of the mechanisms for improving the instructional competencies of faculty/medical teachers in order to adopt & adapt the medical education reform. Developing a cadre of professional and competent teachers and educators for their new roles and responsibilities in medical education and allied health science education requires faculty development through effective Faculty Development Programs. The review of literature about faculty development in medical education has shown that up till now, diverse and myriad approaches are being used by the institutions to train the faculty in order to demonstrate various competencies and roles i.e. a teacher, curriculum planner & evaluator, educational, administrator and scholar at all level of the educational continuum i.e. at micro, meso and macro level. These faculty development approaches used in faculty development program need to be well thought out and planned out before its implementation for ensuring its effectiveness. Hence, through this workshop the participants will be able to understand and apply the tips of effective Faculty Development Program (FDP) in order to develop an outline of effective FDP.

CW04: Integrating the Visual Arts into Medical Training

Facilitators: Carol F. Capello
Date: Oct 18, 2015
Time: 11:00 - 12:30 hrs
Abstract:
Background and Aims: Although the ability to accurately observe is an essential skill for the competent physician, traditional medical education lacks a forum for its development. As such, as medical educators across the world have increasingly harnessed the humanities to foster medical professionalism and critical thinking skills, the visual arts have been utilized in a various ways to focus on observation. It is generally accepted that the visual arts can be clearly related to visual diagnostic skills. We argue that other skills that play integral roles in the practice of medicine, such as communication, attention, and self-reflection, can also be explored and enhanced via the use of the visual arts. We have developed a unique set of visual-arts-based elective courses that both stimulate observational skill development and also challenge students to consider the role of perception in observations, to increase awareness of emotion and bias in observation, to enhance...
communication abilities, and to think critically during the visual process.

**Learning Outcomes:**

1. Recognize the potential uses of visual arts education in medical training;
2. Describe specific methodologies for engaging the medical community with the visual arts;
3. Discuss possible barriers to implementing visual arts programs and identify methods for overcoming those barriers.

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**CW05: How to Change Difficult Learning Situations into Learning Opportunities for the Learner and Teacher-A Teachers Resource Pack**

**Facilitator:** Ayesha Sumera Abdullah  
**Date:** Oct 18, 2015  
**Time:** 13:30 - 15:30 hrs  
**Abstract:**

**Background and Aims:** The mighty winds of educational philosophy, the thrust of educational strategies and the strength of educational innovation all crystallize to one epitome – the learner. The diversity of the learners makes teaching and learning a rich experience which enables growth of the learner and the teacher. This heterogeneity of the learner, the learning environment and the learning context increases the likelihood of engaging in difficult learning situation in teaching and training programmes related to Health. Complexity of the learning difficulties encountered in higher education is more intricate than what it appears to be. Therefore it is imperative for health professions educators to equip themselves with the skills of dealing with difficult learners in a manner that opens learning opportunities for both the learner and the educators. The purpose of this workshop is to enable the participants to develop a deeper perspective of the learner in difficulty and develop skills for changing difficult learning situations into learning opportunities from which the learner and the educator can benefit to the best of their capability.

**Learning Outcomes:** By the end of this workshop the participants would be able to:

1. Develop a deeper and broader perspective of the various difficult learning situations encountered in health care professions-related programmes at the undergraduate and postgraduate levels.
2. Differentiate between different types of difficult learners, identify their needs and apply strategies for dealing with these learners in a constructive manner that opens learning opportunities for both the learner and the educator.
3. Practice microteaching skills for dealing with difficulty students.

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**CW06: Designing Assessment Blue Print in Modular System**

**Facilitator:** Mukhtiar Baig  
**Date:** Oct 18, 2015  
**Time:** 13:30 - 15:30 hrs  
**Abstract:**

**Background and Aims:** Assessment Blueprint is a formal document that guides the development and assembly of an assessment. Successful completion of valid and valuable assessment process requires deep understanding of the knowledge, skills, and abilities that are measured on an assessment, and how these are derived from the outcomes/ objectives upon which the assessment is based. Not only is understanding of the outcomes/ objectives important, faculty developing assessment must also know the relative weighting among the various outcomes/ objectives to be included on the assessment and the item types used to measure each outcome/ objective. This workshop on Assessment Blueprint will provide the faculty members an insight in to developing and utilizing effective blueprint documents in integrated modules.

**Learning Outcomes:** At the end of the workshop, all participants would be able to: - Differentiate between different types of assessment blue prints - Understand different components of assessment blue print - Develop assessment blueprint in integrated module - Justify the use of assessment BP.
Plenary Session-1
Title: Scholarship and Innovation in Medical Education – The Next Big Idea
Speaker: Ronald Harden
Date: Oct 16, 2015
Timings: 17:00 - 19:00 hrs
Abstract:
The excellent teacher has the necessary technical skills and an approach to teaching that embraces an understanding of basic educational principles, an appropriate attitude and passion for their teaching, and the necessary decision making strategies, using where appropriate their judgement and intuition. The excellent teacher also demonstrates professionalism and scholarship in their work. This presentation looks at the teacher as a scholar and in particular their role in innovation in medical education. This role for the teacher is important as there is a need for change in medical education in response to pressures from advances in medicine, changes in public expectations and developments in the delivery of healthcare and new educational thinking and technology. The status quo is no longer an option. We need both immediate and more fundamental long term changes in how our education programmes are delivered, how our curricula are designed, the teaching learning methods adopted and the approaches to assessment of students.
We need to move from the “ivory tower” to the real world. This can be represented in a quadrant with on one axis the “ivory tower” and the real world and on the other axis a traditional or innovative approach. In the bottom left quadrant we have the traditional “ivory tower” approach including the lecture; in the top left quadrant we have the traditional approach in the real world with clinical experiences mainly in the hospital; in the bottom right quadrant a more innovative “ivory tower” approach including the use of the flipped classroom and e-learning and in the top right quadrant the more innovative real word approach including vertical integration and longitudinal clinical clerkships. It is in these innovative approaches to a real world education where we need to see greater innovation by the teacher.
In the short term teachers need to be concerned with innovations that have the potential to be adopted. Schneider (2014) described four characteristics crucial to adoption – perceived significance, philosophical compatibility, occupational realism and inference portability. This analysis when applied to the OSCE can explain its wide adoption as an assessment tool.
In the longer term, however, we need to be concerned also with more fundamental changes in medical education to tackle issues such as the length of medical training, a continuum across undergraduate, postgraduate and continuing education and the adoption of more personalised and adaptive learning tailored to the needs of the individual student. Such changes will require different roles for the scholarly educator. These will include the educator as an anthropologist, an experimenter, a hurdler, a collaborator, a set designer and a story teller (Kelly and Littman 2008).

Plenary Session-2
Title: Curriculum: Challenges in New Perspective and Design
Speaker: Charlotte Ringsted, Andre Jaques Neusy, Khalid Bin Abdulrahman
Date: Oct 17, 2015
Timings: 8:30 - 10:30 hrs
Abstract:
In both undergraduate and postgraduate education the concept of outcomes-based education has been introduced over the past couple of decades. That has been a challenge to educators, in particular regarding specifying the broad aspects of competence and how, what, and when the various aspects are to be learned and assessed. A number of frameworks have been offered to help the educators. These include the Can MEDS seven roles and the ACGME six competencies. Recently frameworks such as Entrustable Professional Activities (EPAs) and Milestones have been introduced. Although these structuring concepts offer nice mental frameworks for designing curricular and assessment programs they may also include a risk of excluding important aspects of professional competence and development of expertise. Medical curricula have witnessed tremendous development worldwide. For justifiable reasons, many leaders of medical schools around the globe have adopted innovative approaches to undergraduate medical education. The main features of the new medical curricula are that the education is problem based, integrated, student centered, and community oriented. Although many researchers have studied the impact of curriculum type on medical students’ mental health (in particular, anxiety and depression as the main causes of stress in student academic life), very few
of the studies conducted to date have addressed the impact of the new medical curricula trends on student performance. The current presentation will shed some light on many aspects of students’ academic life that have been affected by new trends in medical education. Academic performance interpersonal skills, extracurricular activities, and future career are the aspects of students’ academic life most affected.

New changes brought by globalization, a growing health equity gap, a shifting burden of diseases, socio-economic determinants, an ageing of the world populations, the IT revolution and a worldwide trend towards urbanization are impacting how health professionals are trained and practice. According to The Lancet Global Commission on Health Professional Education for the 21st Century, health professional education is failing to adapt to these new challenges. Static and fragmented, content oriented curricula are outdated and do not produce the graduates with the competencies needed to address the priority needs of the people they serve. Several pioneering institutions that are founding members of THEnet have led the way in transforming the medical education model. The medical curriculum is outcome oriented, reflects identified priority health and social needs of the community, provides inter-professional education opportunities and reflects the principles of generalism. A significant proportion of the curriculum is delivered at teaching sites outside the university hospital through a community engaged approach. The Training for Health Equity Network is currently evaluating the impact of these schools and graduates on the needs of the health systems and the health of the population they serve.

Plenary Session-3

Title: Technology and Medical Education: The Love-Hate Relationship

Speaker: John Sandars, Deborah Murdoch Eaton, Hirotaka Onishi

Date: Oct 17, 2015

Timings: 13:30 - 15:30 hrs

Abstract:
The frustration of technology - Insights into why technology may not reach its potential - Effective teaching and learning with technology requires consideration of a complex mix of several factors in the design, development and implementation of the technology. In design and development, it is especially important to align the learner, the content, the instructional design, the technology and the context. In implementation, it is especially important to consider the usability, the phase of the technology adoption cycle, the applicability, the transferability, the scalability and the cost-effectiveness. With this complex mix of factors, it is not surprising that technology in medical education may not reach its intended potential and produces a love-hate relationship. Effective teaching and learning with technology can be achieved by carefully considering the design, development and implementation.

Students entering higher education have different expectations and skills in their approaches to learning. They expect to be able to learn at their own pace, where they want to, and have flexibility in how they learn. One might also consider they have short attention spans and thus teaching material needs to be designed to address how to engage them with learning. However, teachers ignore this at their peril – and the best intentions of curriculum designers to encourage teachers to engage with technology may not happen. This plenary talk will address tackling this aspect of the teacher – learner gap. Information Technology (IT) itself does not facilitate your teaching – how to prepare for the IT-assisted education.

Many medical schools may not best utilise IT-assisted learning (ITAL). There are two main issues to be addressed. Firstly, motivation to learn should be properly managed. Some may feel IT is useful to motivate learners because movies or TV games easily capture youngsters. However, a movie of a boring lecture is also boring. Some TV games do not attract children. Movies or TV games which can capture youngsters are designed carefully with enormous budget, so not easily developed. A key to motivate learners is combination of active learning and delivery of information. As an active learning strategy, web-based discussion is often useful. By e-mails or bulletin board system (BBS), learners can interact with a teacher or one another whenever and wherever they are available. For information delivery, reading and movies are often utilised. Some learners cannot continue concentration on long movies, so shorter movies (<5mins) will be better.

Secondly, areas for ITAL should be cautiously selected. For teachers who do not have any experience to use ITAL, development of ITAL programme is usually more difficult and expensive than conventional one. It is better to start from small programmes and to have a specific reason why you use ITAL. For example, combination of ITAL with community attachment is excellent if both you and learners have accessibility to IT because learners will have many learning needs in
different settings. Some teachers have already utilised a component of ITAL, e.g. introductory movies to assist procedural skill learning. Accumulation of such small pieces of ITAL opportunities is needed to achieve an integrated programme. In the US, MedEdPORTAL is the platform to share small programmes for partners to utilise. Regional collaboration will help medical educators improve ITAL.

Plenary Session-4
Title: Formative and Summative Assessment: Striking the Balance
Speaker: Matthew CE Gwee, Hossam Hamdy, Brownell Anderson
Date: Oct 18, 2015
Timings: 18:30 - 10:30 hrs
Abstract: Formative Assessment: A Potentially Powerful Tool for Learning Improvement
Most teachers are aware that assessment drives student learning and that it is a potentially powerful tool for learning. However, for decades, the primary focus was on the assessment of learning which identifies ‘star’ performers through grading and ranking in high stakes summative exams. Today, it is strongly advocated that assessment must undergo an educational paradigm shift to assessment for learning, i.e. assessment should also be a learning experience for students in order to encourage self-reflection (metacognition); consequently, students can learn from their mistakes and improve on their future performance. Such a learning experience is best achieved through the inclusion of formative assessments in a given course of study. This presentation will discuss the role of formative assessments relative to that of summative assessments.

“Trustworthy” a new paradigm shift in formative and summative assessment at the workplace.
At the workplace service, training and assessment are inseparable. The aim for the presentation is to introduce how assessment of clinical competencies fuses with the training. What to assess, how best and what is its impact are important issues related to formative and summative assessment. The tension between “assessment for learning” and “assessment of learning” and the combination of quantitative measurement and qualitative measurements constitute the rationale of a new paradigm “trustworthy” in assessing performance at the workplace.

“Formative, summative, competency-based Assessment: Striking the Balance”
Medical schools and faculty invest tremendous resources to educate future physicians. Every educational program has defined outcomes and a curriculum to achieve those outcomes, but how can we be certain we are assessing the outcomes we have defined for the students?
How do we assess the concept of competence?
What are the implications of emotion, cognition, and teamwork for medical education assessment?
How can we use self-assessment, observational assessment, reflection, and other types of subjective assessment in medical education most effectively?
This presentation will explore these questions and consider the many important changes that are taking place in the medical education program and the ways we assess the outcomes of the program.

Plenary Session-5
Title: Faculty Development Programs: Challenges and Strategies to Meet the Effectiveness
Speaker: Dan Hunt, Fadil Citaku
Date: Oct 18, 2015
Timings: 16:00 - 17:00 hrs
Abstract: The definition of who is a faculty member in a medical education programs varies immensely not just from one country to another but there is variation from one medical school to another within the same country. With that much variation, it is challenging to come up with a set of standards that would identify an excellent faculty development program but one international group is doing just that. This presentation will review the background to the decision of the AMEE ASPIRE decision to engage an international group of experts in faculty development and their progress in identifying accreditation like standards that can be used to select and honor excellence in faculty development.
Objective: To identify and empirically investigate the dimensions of leadership in medical education and healthcare professions. Design a population-based design with a focus group and a survey were used to identify the perceived competencies for effective leadership in medical education.
Setting: 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 wassent to health professionals from medical schools and teaching hospitals in six countries.
Participants: 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).

Measures: A 63-item survey measuring leadership competencies was developed and administered via electronic mail to participants.

Results: 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 λ=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).

Conclusions: 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.
Symposium 1: Practicing Professionalism and Ethics: New Dimensions

**Speakers:** Anis Ahmad, Ming Jung Ho, Usman Mahboob, Osman Erol Hayran

**Date:** Oct 17, 2015

**Timings:** 11:00 - 12:30 hrs

**Abstract:**

**Background:** Multi-model approach to understand medical professionalism. The aim of this workshop is to consider the different models of professionalism, including cultural and inter-cultural elements that are part of professionalism. The key questions for discussion include; what are the key cultural aspects, what is their significance, and how can they be incorporated into a core curriculum of professionalism. The interactive workshop will facilitate a critical discussion about these fundamentally important aspects, and will explore the variance between and across countries and cultures with respect to professionalism.

**Purpose:** Hospital accreditation has become a global trend for improving the quality of health care services. However, there is a paucity of literature on the effects of hospital accreditation on medical education. The purpose of this study was to investigate the effects of hospital accreditation on medical students in Taiwan.

**Method:** From 2010 to 2012, the authors conducted semistructured interviews with 34 senior, clinical year students at 11 different medical schools in Taiwan. Following a grounded theory approach, the authors transcribed and analyzed the transcripts concurrently with data collection in order to identify emergent themes.

**Results:** Aside from the intended positive effects of hospital accreditation, this study revealed several unintended impacts on medical students, including decreased clinical learning opportunities, increased trivial workload, and violation of professional integrity. Taiwanese students expressed doubt concerning the value of hospital accreditation and reflected on the cultural and systemic context in which accreditation takes place. Their commentary addressed the challenges to medical professionalism associated with the globalization of hospital accreditation processes.

**Conclusions:** This study suggests that, beyond the improvement of patient safety and quality assurance, medical educators must recognize the unintended negative effects of hospital accreditation on medical professionalism and take into account differences in culture and health care systems amid the globalization of medicine.

**Learning Outcome:** The intended outcome will be a framework of curriculum outcomes, or syllabus, that participants can take back, to inform the curriculum development in their own institutions. Professions differ from occupations by the presence of an assessment process for entry, an extensive body of specialized knowledge, a code of ethics and a professional association. ‘Professionalism’ in medicine is a term to describe the professional attributes required for effective medical practice that the community could trust. That means it is more than having adequate knowledge of medicine and sufficient amount of procedural ability. Professionalism is closely linked to modern ethical precepts and reflects traditional core values. Ethics as a branch of philosophy is concerned with what is right, moral or fair. Ethical codes are important in professions because they provide a guide to expected behavior, and as principles that can be used to take action against members accused of malpractice. General ethical codes exist in religion and philosophy and they can vary among cultures. The nature and importance of ethical codes vary among professions also. Medicine, as being one of the oldest and most powerful professions, has a long training period, traditions of independence and developed ethical rules. In this presentation, brief information about the evolution of professionalism in medicine and principles of medical ethics will be discussed in a cultural context.

The post-modern era of ours presents an unprecedented progress in technology. The scientific revolution, has perhaps reached its climax manifested in nano-technology and nuclear medicine. There is an ongoing urge for professional excellence which is often confused with command over technological capacity and...
skills. No doubt, use of robotics in healthcare has made complex medical and surgical interventions a possibility. With all these achievements importance of ethical dimensions of professionalism has further multiplied. A scheme of medical education that does not take full care of this vital area cannot produce a holistic medical professional. This paper makes an effort to identify transformatory role of ethics in professionalism. Patient-doctor relationship is no less important than medical or surgical interventions. The paper suggests inculcation of certain ethical values in order to develop a high professional profile of a Muslim medical and health care professional. The key value Islamic sourcesunder cover is 'ador fairness in its widerconnotation. Medical curriculum, learning outcomes, as well as co-curricular activities should ensure inculcation of this core value as an integral part of a professional’s personality. A holistic understanding of ‘adh results in incorporation of its subsidiary values i.e. ma’ruf (good), amanah (trusteeship), sidq (truth), itqan(excellence), wastiyah (moderation), sabr(steadfastness) and Isaaor ghabriah (altruism).

Symposium 2: 21st Century teaching and Learning

Speakers: John Sandars, NG Patil, Ronald Harden, Melih Elcin
Date: Oct 17, 2015
Timings: 11:00 - 12:30 hrs

Abstract:
It is essential that future medical and healthcare professionals are adequately prepared to respond to the challenges of healthcare in the 21st century. An essential aspect of the teaching and learning is a cognitive-developmental approach to teaching and learning that facilitates self-authorship, with a focus on both cognitive maturity, an integrated identity and mature relationships. There are major implications for the curriculum of the future, with an emphasis on both learning outcomes and self-authorship goals. This can be achieved by skilfully promoting both learning and development experiences that challenge current world-views and the use of awareness raising questions.
Problem Based Learning (PBL), as a part of problem based education, is an educational strategy and process which enhances active learning; cultivates the culture of lifelong learning, team work, and understanding of basic sciences in clinical context.

Majority of medical schools who have introduced PBL in their curriculum use hybrid approach. Faculty of Medicine, The University of Hong Kong reformed its MBBS curriculum with introduction of PBL in 1997. The main challenges, however, remain in maintaining PBL tutor enthusiasm, progressive case writing, and avoidance of students bringing habit of rote learning in PBL tutorials; and continuum of PBL culture in clinical years. There is also misperception that teacher role has no place in PBL style curriculum. In fact, there is an opportunity to integrate PBL and PBT to achieve best of the both worlds, particularly in clinical years
Integration of PBL and Problem Based Teaching (PBT) by combination of case reports, videos and real patients as triggers brings about effective student engagement in PBL process complemented by content experts who provide a dynamic resource and interaction in the form PBT. Author will highlight the experience with examples of integrated approach to PBL and PBT.
In the past in education we have been notoriously conservative. The enormous changes that have taken place in medical practice have not been mirrored in how doctors are educated and the current education programme has been seriously criticised for its failings.
To meet the demands of the 21st century there is a need for greater collaborations internationally and locally between those concerned with the different phases of education and between the different health care professions. This will require more inter-professional education initiatives and a continuum of education from undergraduate through postgraduate to continuing education. Just as in medicine where we have a move to personalised medicine, so in education we will see a move to personalised learning tailored to the needs of each individual student. While the concept of an adaptive curriculum requires fundamental changes in education, we can move in the direction of implementing the approach within the existing framework. How this can be achieved is illustrated. Of the FAIR principles of effective learning (Feedback, Activity, Individualisation and Relevance), individualisation is perhaps the most sought after but also the most elusive.
If we are to meet the challenges of the 21st century in medical education we must be bold and innovative, think outside the box and move away from more a blind acceptance of traditional approaches. The report of Institute of Medicine in 1999, ‘To Err is Human’ had an important impact on healthcare
systems and health sciences education. The healthcare systems have been struggling with many problems for many years which may also affect the educational environments. The students of health sciences achieve their preclinical professional development in their schools without having any contact with other health professionals and some lucky ones meet them in their clinical years, but many of the health professionals have their first professional contact with the others at their workplaces after the graduation. The students of health sciences may have unequal learning opportunities within the clinical environment due to the variations in healthcare delivery systems, they may experience insufficient patient care due to the early discharge periods, and they may receive less guidance and feedback in the clinical settings due to the excessive number of students and lack of faculty members. All those problems unfortunately lead to more threats for patient safety. Many students experience fear of making mistakes while working on the patients that have negative impact on their appropriate learning and achieving the competencies. Using simulation modalities in health sciences education fills many gaps in the clinical educational settings, and also helps to cross the quality chasm. Simulation with the additional impact of interprofessional education in health sciences will improve patient safety.

**Simulation Based Education in Health Care**

**Speaker:** Melih Elcin

**Introduction:** The need for using simulation at all levels of medical education, the variety of simulation modalities and the evidence of their effectiveness in achieving many technical and non-technical skills have been one of the major concerns in the recent years. Many institutions in the health sciences education are implementing simulation activities to their curricula. Some modalities are cheaper while some are really expensive. Some simulation modalities require special facilities.

The faculty members who are about to make decisions on the type and the content of simulation for their curriculum may have many questions. They may have some hesitations. They may need guidance. Some of them have been using simulation for many years, and they want to improve their program. Learning and encouragement will take place while listening, presenting, sharing, and discussing the methodologies and experiences.

**Objectives:** The goal of the workshop is to provide participants an opportunity to:
- Review and define different types of simulation modalities
- Discuss how to develop and implement simulations activities for their programs
- Identify core steps in implementing and using simulation in healthcare education.

**Materials and Methods:** We will present the simulation modalities for a variety of health sciences education at undergraduate and graduate levels. The participants will share their experiences and/or expectations. The workshop will continue with small group activities on identifying the core steps in assessing the learner needs, developing programs, and implementing simulation activities.

**Format:** Combined short didactics and small group activities.

**Audience:** Novice to intermediate.

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**Symposium 3: Role of students in curriculum planning**

**Speakers:** Hirotaka Onishi, John Dent, Dan Hunt, NG Patil

**Date:** Oct 18, 2015

**Timings:** 11:00 - 12:30 hrs

**Abstract:**

**Voices of Students:** A key to improve the curricula

Student-teacher relationship is one of the most important issues to improve the curricula. In East Asian countries, however, Confucian sense of seniority may interfere with the honest communication between students and teachers. Some open-minded teachers compare students to customers of their education but other teachers do not have sufficient professionalism as educators to lead students’ learning. Teachers must understand the difference between what teachers teach and what learners learn. Students learn only some portion of formal curriculum but they learn other areas as informal curriculum. To identify the informal curriculum, teachers must collect such information from students. Here, teachers have to pay attention to the sense of seniority because it may interfere with open comments from students.

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The Whole Curriculum

\[ \text{= What learners learn} \]

Formal (Manifest, Overt, Planned) Curriculum

Informal (Hidden, Covert) Curriculum
Opinions or perceptions from the students for the curriculum should be organised and evaluated to decide what and how to improve. Combination of quantitative and qualitative information is needed to enrich the suggestion for the next round of the curriculum. Some students like those teachers who put high marks but such a behaviour may hide the weak areas for students. Both teachers and students must understand the meaning of the evaluation to better improve the future curriculum.

Abstract:
One of the three founding areas for AMEE’s ASPIRE program is the degree of involvement or engagement that schools provide their students. A key component of this measure of excellence is the role that students play related to the planning and management of their school’s curriculum. This presentation will provide an analysis of the role of students in curriculum planning and the characteristics of successful ASPIRE applicants in this area.

At faculty level, there are various avenues to obtain student feedback on quality of teaching, delivery of the syllabus, lectures, seminars, practicals, clinical exposure, assessment practices etc. Such feedback can be analyzed and acted upon electrically and at face to face staff & student consultative meetings and forums.

Today’s students have access to massive resources which they can download from websites. Student assemblies and association such as International Federation of Medical Students’ Associations (IFMSA) and Asian Medical Students Association (AMSA) on their electronic forums compare curriculum offered by individual medical schools; including strengths and weakness. IFMSA identified variation in standards, different level of medical knowledge, skills and behavior acquired by graduates; lack of vision of cooperation, no global system to provide implementation of international standards.

Medical councils as authorized registration bodies always make a point to meet students to obtain their opinion regards overall performance of medical faculty. There are examples, worldwide, where recognition of medical degrees has been suspended of both undergraduate and postgraduate courses. Medical students as tomorrow’s doctors and end users of education have a major role to play in curriculum planning, delivery and reforms.

Mark Twain famously said “I don’t want my schooling to spoil my education”.

The SPICES approach from the Students’ Perspective

New teaching opportunities in a variety of ambulatory care venues can be created which focus on the SPICES approach to curriculum reform. Clinical teaching traditionally takes place in hospital wards or during outpatient consultations. Alternative teaching programmes based in ambulatory care have been described which provide patient contact in environments more suited to structured learning. It can be seen that each of these programmes can include elements described in the SPICES model of educational strategies (Harden et al 1984) by being Student-centred, Problem based, Integrated / Inter-professional and System-sensitive and by providing both Community and Elective opportunities.

An Ambulatory Care Teaching Centre provides a dedicated space for student learning using a bank of volunteer, system-sensitive patients; a variety of clinical tutors and a centre administrator. Learning is student-centred and integrated to experiences elsewhere or earlier in the curriculum. An Integrated Ambulatory Medicine Programme uses patients invited from the outpatient department to augment students’ specialty-ward attachments. Students can integrate these new experiences with revision sessions in the adjacent clinical skills centre and by attempting case-based problem-solving exercises. Further patients are visited in community settings. A Structured Programme in Day Case Surgery allows 4th year students to follow a patient’s journey through pre-op preparation, surgery and post-op appointments. In addition to other elements in the SPICES model this also provides an inter-professional experience and gives students insights into disciplines they may wish to study further in elective study blocks.

Developing a new teaching programme in an ambulatory care venue provides an opportunity to use elements of the SPICES approach to learning. Students can use the SPICES model to reflect on their current curriculum.

Symposium 4: Program Evaluation and Accreditation: Strategies and Challenges
Facilitators: Khalid Bin Abdulrahman, Chaudhry Aqeel Safdar, Rehan Ahmad Khan, Gohar Wajid
Date: Oct 18, 2015
Timings: 13:30 - 15:30 hrs
Abstract:
Many medical schools around the world have engaged in national program accreditation processes. The majority have responded to the movement towards compulsory academic accreditation as a part of global quality assurance
activities. However, there are other medical schools in some part of the world that are still concerned about the value of program accreditation. The current talk will present the prominent values of program evaluation and accreditation as a baseline of quality assurance and a step forward in the excellence of medical education. The general outcomes of program accreditation will be presented in response to accreditation standards and key performance indicators. The limitations of program accreditation will be addressed in the current presentation as well.

We have eloquently heard about the rationale, processes and challenges of program evaluation and accreditation. The impact of all these processes on medical education all around the globe is evident. It would seem that accreditation is a simple issue, but not all accreditations are created equal, nor achieved easily.

Can there be a way where the outcomes are automatically registered, analyzed and reported upon? Should there be different types and levels of accreditation? Can we, or should we, cater to the regional variations? Can we generate “credit points” and automatically upload them? Should there be programs first or accreditation first, or is it even sensible? Can virtual visits be arranged? Can the “product” be assessed automatically and longitudinally? Can “incident” reports be collected centrally and shared? Can the society and the local and global community be part of this process? Can the system be streamlined to reduce the bureaucratic red tapeism? Or do we need to rise above “accreditation” as we know it today?

**Symposium 4 C: How to gain the most out of program accreditation? (The process and challenges)**

**Speaker:** Rehan Ahmed Khan

The accreditation of an educational program is a tedious process involving all its stakeholders. Choosing the right approach of the program accreditation is very important. One has to understand the paradigms behind program evaluation and then select the most appropriate method depending on the desired outcome. It can be directed towards the objectives of the program, its process or the eventual outcome. This would guide choice of the desired model to be used to evaluate the program, be it Kirk Patrick, CIPP or Logic model. It is also important to know that these models require particular expertise and involves challenges and difficulties to evaluate a program.

**Symposium 4 D: The impact of program Accreditation on Medical Education**

**Speaker:** Gohar Wajid

In broad terms, accreditation is the process of reviewing the compliance of educational institutes with predefined standards. It may be a voluntary, non-governmental process or mandatory government based or semi-government process. The goal of accreditation is to ensure that the educational institute under scrutiny is providing educational services as per defined standards.

By accepting accreditation status from a recognized accreditation organization, an educational institution agrees to uphold the quality standards set by the accreditation organization. The accredited institution also agrees to periodically submit to accreditation renewal review. In order, for the accreditation process to be successful and produce desired results, the accrediting agencies must produce a set of standards/criteria that match with the expected quality of education to be provided by the educational institutions. The accreditation process may not have its desired impact on the quality of education if the standards are not well defined, or they are not aligned with the desired quality levels, or the accreditation process does not have the capacity to accurately measure institutional compliance with the standards.

Medical colleges in Pakistan have a long standing history of accreditation (it was called ‘inspection’ for long time) done by the Pakistan Medical and Dental Council (PMDC). Accreditation of the colleges has gained importance in Pakistan due to increasing requests from the private sector to open medical colleges and rapid influx of medical colleges from the government as well. This has resulted in a massive change in the medical education scenario of Pakistan, putting a lot of burden on the PMDC to review its accreditation process and make it at part with the global changes and advancements in the quality of medical education.

This presentation will review the likely impact of the current accreditation process on Pakistani medical colleges, analyze its strengths and weaknesses and suggest some changes in the process to make it more robust and bring it at par with the global advancements in accreditation of medical schools.
Title: Perception of Faculty/Physical Therapy Teachers towards Professionalism in Pakistani Context/Culture

Presenter: Syed Shakil-ur-Rehman
Author: Syed Shakil-ur-Rehman
Institute: Riphah College of Rehabilitation Sciences, Riphah International University, Islamabad
Email: shakil.urrehman@riphah.edu.pk

Abstract:
Background: Physical Therapy (PT) is an emerging field of health sciences in Pakistan and 22 universities offer undergraduate and graduate programs in this discipline. To understand the Professionalism as core competency and phenomenon in real-life practice of physical therapy faculty/teacher is very important.

Objective: The objective of the study is to determine the core elements that describe Professionalism among the PT faculty/teacher in Pakistani context/culture.

Methodology: This is a Qualitative research methodology with case study-descriptive type as a research approach/strategy. The case study strategy is used to understand the complex social phenomenon in order to retain the holistic and meaningful characteristics of real-life events. Semi-structured interviews were conducted with 15 faculty members/teachers of 5 different universities from 5 different cities of Pakistan, from January to June 2013 at different time. Consent was taken from faculty, no conflict of interest raised. The inclusion criterion was to include the faculty members with 5-year experience after post-graduation and teaching at university level. The interviews were audio recorded, transcribed and manually analyzed by coding and thematic analysis done by three researchers.

Results: Expert in subject/domain in knowledge and skill, Behavior and Attitude towards the students/patients/staff, Autonomy, serving and benefits to the community and accountability health services, Compassion, moral reasoning, reflective thinker with professional ethics, trustworthiness, honest and team-based approach.

Conclusions: It is concluded that for professionalism expertise in subject domain & skills is the most important element. Besides that behavior and attitude towards students and patients are the key components of professionalism. It is concluded that in our Pakistani culture, there is lack of professional behavior and professionalism in PT teachers/faculty.

Title: Project Professionalism Punjab

Presenter: Junaid Sarfraz Khan
Author: Junaid Sarfraz Khan
Institute: University of Health Sciences, Lahore
Email: provc@uhs.edu.pk

Abstract:
Background: Project Professionalism Punjab was launched by the University of Health Sciences Lahore Pakistan in January 2015. The notion of professionalism is more widespread and relevant in the modern era than a century ago. Professional and ethical attitude or behavior is the major principle of all healthcare issues. All over the world, there is a move to awaken professionalism amongst our present and future healthcare professionals.

Aim and objectives: The aim of the project is to foster medical professionalism identity in medical students and medical professionals. The objective of the study is to examine and understand the development of concepts of professionalism across the learner's lifespan as students, postgraduate trainees and faculty; and understand the influence of the environment, society, culture, education and parenting in essence the social fabric on the development of the medical professional identity.

Methodology: Since 1st January 2015, each month, one caricature sequence, one image and one video-clip is uploaded on the University website www.uhs.edu.pk. Students, faculty, patients and medical administrators are encouraged to view this media and submit narratives of 500-1000 words to the University of Health Sciences Lahore before the end of the month. These narrations present a critical review of any one or all of the three categories. The narrations are uploaded and provide real life (personal) examples if possible. The stories/descriptions are analyzed in the light of the objectives of the study.

Results: Total 98 responses were received over the four months (January 2015 to April 2015) of the study. Out of total responses, 62 narratives were on caricature sequence, 14 on images and 22 on video-clips. Each narrative described a different aspect of professionalism. The narratives were analyzed by an expert group of medical educationists and behavioral scientists. The
narratives were assessed and analyzed to identify if the writer was able to make relevant abstract and concrete connections of professional behavior with examples of best behavior learned through human development stages from birth to present.

**Conclusions:** Various layers of professional traits usually remain hidden or ignored by the professionals but come to the light or explored when a specific scenario is given to the people belonging to some specific profession. In the majority of the narratives, it is evident that professional behavior is derived from the behavior of the society and culture modified to fit with the professional environment and requirement. They also identified the expectations of the community from the healthcare providers and develop strategies to foster medical professionalism in students, postgraduate trainees and faculty.

**Title:** Relationship between Quality of Work Life with Empathy in Qom University of Medical Sciences

**Presenter:** Hoda Ahmari
**Authors:** Hoda Ahmari, Ahmad Kachoie, Boshra Ahmari, Tahmineh Dadkhah Tehrani, Ahmad Parzad, Zahra Jafary Nodoushan
**Institute:** Tehran University of Medical Sciences, Tehran, Iran
**Email:** ahmari9929@yahoo.com

**Abstract:** Faculty as the largest provider of educational services should have a good quality of work life Order to provide the best education to the students. This study aimed at assessing relationships between qualities of work life with empathy in Qom University of Medical Sciences. The data for this study was collected by the Census collects of 76 faculty members working in Qom University of Medical Sciences.

**Methods:** This cross-sectional correlation study was conducted with Census collects of 76 faculty members working in Qom University of Medical Sciences. Data were gathered through self-administered questionnaires containing work quality of life questionnaire and empathy. All statistics were computed using the SPSS software (version 16) with Pearson and t-test. Results: In this study, the majority of faculty were men (68/4), married (84/2) and Professor Assistant (60/5). The findings showed that the majority of the investigated sample of the quality of working life, empathy had a moderate gain. The significant relationship was observed between equality of work life and empathy (p<0/05).

**Conclusion:** Based on the findings, the case of study had moderate of quality of working life and empathy. With regard to the impact empathy on quality of work life due to this issue, particularly by managers is essential.

**Title:** Communication Skills Training Throught an Inter Professional Education Initiative for Undergraduate Multi-Professionals Students

**Presenter:** Ismat Mutwali
**Authors:** Ismat Mutwali, Awad EM Elhassan, Sara S Ibrahim, Aida A.E. Mhamed, Aisha Aglan, Enas Fadi Ebari
**Institute:** Alzaeim Alazhari University, Khartoum, Bahrain
**Email:** ismatwally@yahoo.ca

**Abstract:**

**Aims:** Our aims were to teach multi-proessions students, from Alzaeim Alazhari University, Sudan, to learn together and gain the knowledge, skills and attitude that help them to work together. And to encourage the undergraduate multi professions students to learn specific communication skills associated with breaking bad news.

**Methods:** A session of training of trainer was first organized to train the staff participating in the IPE. Senior students from the colleges of medicine, nursing, anesthetia and midwifery were invited to participate voluntary in the IPE. 36 multi professions students were selected and divided into 6 multi professions groups. Selected students attended one lecture and four sessions on the IPE and the roles and responsibility of the different professions. The participants learned and practiced six different scenarios of breaking bad news. The IPE was evaluated by administration of a pre and post questionnaires to determine the attitude of the participants to the IPE and towards the training of communication skills within multi professions teams.

**Results:** 30 multi professions students responded to the questionnaires (83.3%). The participants’ responses showed that, they have gained knowledge, and become more oriented with their roles and responsibilities. The IPE training course on breaking bad news was accepted by all the multi professions students. The participants’ overall change of attitude was significant.

**Discussion:** The results showed that the implemented IPE initiative had positive effects on the attitude and perception of the undergraduate multi professions students; and that breaking bad news training is possible and practicable within multi professions teams.
**Title:** Relationship between Quality of Work Life with Interpersonal Forgiveness in Qom University of Medical Sciences  
**Presenter:** Hoda Ahmari  
**Authors:** Hoda Ahmari, Nushin Kohan, Boshra Ahmari, Nazanin Shamaeiyan Razavi, Mahlia Salajegheh, Ahmad Kachoie  
**Institute:** Tehran University of Medical Sciences, Tehran, Iran  
**Email:** ahman9929@yahoo.com  
**Abstract:**  
**Introduction:** Faculty as the largest provider of educational services should have a good quality of work life in order to provide the best education to the students. This study aimed at assessing relationships between quality of work life with interpersonal forgiveness in Qom University of Medical Sciences. The data for this study was collected by the Census collects of 76 faculty members working in Qom University of Medical Sciences.  
**Methods:** This cross-sectional correlation study was conducted with Census collects of 76 faculty members working in Qom University of Medical Sciences. Data were gathered through self-administered questionnaires containing work quality of life questionnaire and interpersonal forgiveness. All statistics were computed using the SPSS software (v.16) with Pearson and t-test.  
**Results:** In this study, the majority of faculty were men (68/4), married (84/2) and Professor Assistant (60/5). The findings showed that the majority of the investigated sample of the quality of working life, interpersonal forgiveness had a moderate gain. The significant relationship was observed between quality of work life and interpersonal forgiveness (p<0.05).  
**Conclusion:** Based on the findings, the case of study had moderate quality of working life, and interpersonal forgiveness. With regard to the impact interpersonal forgiveness on quality of work life due to this issue, particularly by managers is essential.  
**Key Words:** Quality of Work Life, Interpersonal Forgiveness, Qom.

**Title:** Training of Adolescent Reproductive Health: Improving Knowledge about Adolescent Reproductive Health  
**Presenter:** Rani Rusdiana  
**Authors:** Tifa Pascariyanti, Ufia Dachlan, Rani Rusdiana, Yosi Duwita Arinda  
**Abstract:**  
**Background and Aims:** Adolescent reproductive health knowledge is very low in Indonesia. The study aimed at assessing knowledge about adolescent reproductive health in Indonesia among high school students. The method was used in this study was an active learning method. The teaching was done by the method of group discussion (FGD) so teens can play an active role in the learning process. The data were gathered through self-administered questionnaires containing adolescent reproductive health knowledge.  
**Methods:** This activity was followed by 196 teens. Training is done by the method of active learning combined with video playback and the Focus Group Discussion. Mechanism of pre test and post test is performed to evaluate activities both in the substance as well as the technical implementation. This activity was held at Yogyakarta in May until June 2014.  
**Results:** These activities take place successfully with the level of satisfaction is seen from various aspects to reach 90%. In addition all participants recommended this kind of activity could be held regularly every year with a larger scale.  
**Conclusions:** Adolescent reproductive health training is an example of a method of education that is able to increase the understanding of reproductive health. Formation of adolescent reproductive health cadres as a result of activities, can be a means of providing counseling to the peers who had health problems of reproduction.
Title: Attitude of Health Care Students towards Disability: A Comparative Study

Presenter: Arshad Nawaz Malik
Authors: Arshad Nawaz Malik, Raheela Yasmeen, Imran Amjad
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Abstract:
Background: The use of non-prescribed drugs without the consultation from a qualified doctor is known as self-medication. This practice is used widely all over the globe, among general population as well as the students.

Objective: To determine Prevalence of self-medication in amongst the medical and non-medical university students of Rawalpindi and Islamabad Pakistan.

Method: Our study design was comparative cross-sectional survey. A non-probability convenient sampling was applied from four medical and four non-medical universities of Rawalpindi and Islamabad, Pakistan. Data was collected by structured close ended questioner. SPSS 21 was used to analyze the data.

Results: Total participants were 770 out of which 451 (58.57 %) were medical and 319 (41.42%) were non-medical students. The overall prevalence of self-medication was found to be 78.60 % out of them 51.2 % also prescribe medicines to others without any consultation with any doctor. There was significant difference (P<0.05) between medical (80.90%) and non-medical students (70.20%) for self-medication. Frequency of self-medication is high in male (58.60%) as compare to female (41.40%). Most common reason was, that problem is not serious (51.90%) and most common problem was headache (43.1%) and common cold (17.30%), whereas commonly used medicine were painkillers (62.2%).

Conclusion: The prevalence of self-medication is very high among the medical and non-medical students and there is a need to reduce this practice by increasing awareness over-all in the society as well as in the universities.

Objectives: The objective of this study is to determine the attitude of students towards persons with disability and to suggest the changes in curriculum to achieve positive outcome.

Methodology: A descriptive comparative study was conducted to analyze the attitude of physical therapy students of Rawalpindi/Islamabad. A sample of 231 students (55 post grad and 176 under grad) was recruited through purposive sampling. The standard tool Attitude towards disabled person (ATDP) A & B performa was circulated. The total score was from 0-120 and the high score shows the positive attitude.

Results: The sample was composed of 40 males and 291 females. The participants belonged to age groups between 21 and 27 years of age and the mean average age was 24.5±2.02 years. The Under grad mean professional score was 66.02±11.02 and mean personal score 72.60±12.30 (P=0.020*). The post grad mean professional score was 67.54±9.67 and mean personal score was 69.54±8.75 (p=0.148). There was significant difference in personal and professional attitude of under grad student and not significant in post grad.

Conclusion: The study summarizes that the personal attitude is more positive than professional attitude of physical therapy students. The study also reported that there is significant difference in attitudes of under grad as compare to post grad. The post grad students have no significant difference. Thus, it appears that post grad students can dissociate personal from professional attitude. The attitude should be close to each other for proper management. There is need to modify the curriculum about the significance of disability.

Title: Professionalism in Curriculum: the Students’ Perspective

Presenter: Fareesa Waqar
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Abstract: 

Background and aims: To find out the students view point regarding professionalism as part of curriculum in small group discussions a 20 weeks study with 5 batches of students attending small group discussion in obstetrics and gynecology ward Railway hospital during their clerkship between February to June 2015.

Methods: 55 medical students participated in a course evaluation questionnaire five focus-group interviews exploring their experiences of medical professionalism in small group discussions. Data
were analyzed using the principles of Interpretative Phenomenological Analysis. After obtaining ethical approval for the study from the ethical committee fifth year medical students were given perform as to complete. The students completed an anonymous questionnaire, responses being voluntary and confidential. All students were invited to take part in semi-structured focus-group interviews.

Results: Six parameters were identified: Poor interaction of teacher with students, lack of preparation of the topic by students, Time management, specific learning objectives achievement, students views on feedback perform as (ticking) and students views on how medical professionalism should be taught. Out of 55 students 27 were males and 28 were females. Most students resented filling feedback perform as, all of them unanimously agreed that professionalism should not be part of official curriculum in final year on the other hand most agreed that following learning objectives, faculty development and student selection criteria should be strict.

Conclusions: Students are not in favor of professionalism to be included as part of formal curriculum, they do believe in faculty development and student selection criteria.

Title: Empathy and Professionalism the fifth Year Students Perspective

Presenter: Fareesa Waqar
Authors: Fareesa Waqar, Shazia Riaz, Saadia Sultana, Shamsunnisa Sadia
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Abstract:
Background and aims: The students in the modular system are in touch with the patients from the beginning of phase 1 but it has been seen that their empathy towards patients reduces especially after third year and this has been proven in many studies in the past which were qualitative.
Methods: 36 students who had completed their course in communication skills were selected from the fifth year MBBS class and a semi-structured qualitative interview was conducted discussing six aspects of a physician with empathy, content analysis was used to analyse the interviews. Written, voluntary, and informed consent was obtained from all participants. The study was approved by the Regional Ethics Committee.

Results: The fifth year students who were interviewed had a discussion on six aspects of a physicians role which included: importance of factual knowledge of medicine, professionalism, emotions and care, controlling and masking emotions, cynicism and ethical approach with honesty. All students agreed on keeping a distance without getting emotionally involved and also regarding ethical approach with honesty. The students quoted their personal experiences and understood a professional attitude without appearing callous.

Conclusion: This study was on a small part of physicians to be so no final conclusions can be drawn from such a small number of participants but it does suggest that too much emphasis on professionalism and professional distance can affect the outcome of empathy negatively also factual knowledge and command of the contents of curriculum is important to show empathy in a professional manner.

Title: Factors Influencing Medical Students’ Choice for Family Medicine as Specialty in Pakistan

Presenter: Sumera Badar Ehsan
Authors: Sumera Badar Ehsan, Musarrat Ul Hasnain
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Abstract:
Selecting a career is a difficult decision for every student especially in medical profession. Multiple factors can effect this decision. Family medicine is a specialty which integrates biological, behavioral and clinical sciences. In developed countries General Practitioners start practice after getting proper training and passing exams. In Pakistan this specialty was introduced by College of Physicians and surgeons in 90’s but it can’t be institutionalized. This study was conducted in two medical colleges of Faisalabad to identify the factors that influence students for opting / not opting Family medicine specialty.

Objective: This study was designed to identify the factors determining family medicine specialty choice among medical students. Second objective was to find out the difference if any in the factors that affect the choice for this particular specialty between private and public sector medical college students.

Method: A mix method study with sequential quantitative first design was conducted in two medical Colleges of Faisalabad after taking ethical approval. In first stage a survey questionnaire was
distributed to final year MBBS students after taking their consent for this study and total of 252 students participated. In second stage 12 students (8 from public, 4 from private college) were randomly selected from public and private sector medical college. It consisted of those students who selected family medicine as a career and also those who selected some other specialty. Semi-structured interviews were conducted in second qualitative phase. Quantitative data were analysed on SPSS-17 and transcripts were made form interview data. Thematic analysis was completed for qualitative data.

**Results:** Total 252 students participated (public sector= 190 private sector=62) in this study and 44 students were familiar with this specialty. Among these 44 students, only 16 selected it as a career. Multiple factors were identified which affected students’ choice for a particular career. Among them three most important were found to be personal interest, Feasibility and family pressure. Major factor for not selecting family medicine was lack of awareness about the scope of specialty.

**Conclusion:** Lack of awareness about family medicine specialty is dominating factor in less predilection for opting family medicine as career. Career counseling, role modeling and exposure to this specialty during clinical years can play an important role in promotion of this field.

**Title:** How do Medical Student Attitudes towards Professionalism Change during the Pre-clinical years?

**Presenter:** Julie Yun Chen
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**Abstract:**

Though the informal and hidden curricula are instrumental in shaping students’ attitude towards professionalism, some formal curricular elements may also play a role.

**Aim:** The aim of this study was to investigate student attitudes towards medical professionalism during the early years of medical school.

**Method:** The study population comprised two cohorts of students (n=420) admitted to medical school in the 2012-13 academic year. Only the “new curriculum” cohort had a medical humanities and professionalism curriculum within their programme of study. Study participants completed a professionalism attitudes questionnaire and focus group interviews. Within- and between-cohort comparisons were made using the paired t-test or repeated measure ANOVA, and the independent t-test respectively. Interviews were analysed for recurrent themes.

**Result:** The questionnaire response rate was 54% (217/402). Both cohorts had better attitudes towards clinically-oriented aspects of professionalism over time. However the “new” cohort had a more positive change in attitude regarding balance in work and personal life compared with the “old” cohort. Role modelling, clinical contact and service learning affected student attitudes towards professionalism.

**Conclusions:** A humanistic emphasis in the curriculum may have a positive impact on student attitudes towards professionalism. Medical students in their early years also realize the contextual nature of professionalism which should be discussed explicitly in the curriculum and further explored going forward into the clinical years.

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**Title:** ‘Reflection’ as a Tool for ‘Personal Empowerment’ – An Insight from the College of Medicine, Princess Norah bint Abdul Rahman Women University (PNU)

**Presenter:** Noreen Zahid Mirza
**Author:** Noreen Zahid Mirza
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**Abstract:**

Medical education has traditionally focussed on the assimilation of vast amounts of knowledge and on clinical apprenticeship as the ‘hallmark’ of good training, and has undervalued reflection in learning. Today…medical education needs to prepare students for lifelong learning….who take a deep approach to learning and also to equip students to determine their own learning needs, set their own learning goals and monitor the…continuing progress. To achieve this, a more reflective approach is called for’ (Pee et al, 2000).

It is imperative for medical students to hone the skill of reflecting on their learning process, becoming aware of their strengths and weaknesses and identifying paths towards personal empowerment. A self-empowered person is able to make positive choices in life.

Reflection writing was made an integral part of the course on Professionalism following Kolb learning cycle, and for writing the 3W’s scheme. The four category analysis as outlined by Kember, McKay, Sinclair, and Wong (2008, pp. 370-5) was used for
assessing the level of student reflection. The online journal Penzu.com was used for reflection writing and feedback by the tutor. Reflections of 4 students were followed over a period of one year. The analysis brought to light some interesting facts about their deeper thoughts and understanding. It highlighted the gradual development of subtleties of behavior required by a medical student for the rest of their lives.

To conclude, introduction of reflection writing for the undergraduate medical students has not only served to make the students self-aware but also blossomed professional behaviors like integrity, accountability and taking initiatives.

Title: Can Medical Students Teach Communication Skill? : A Mixed Method Study of Cross-Year Tutoring

Presenter: Osamu Nomura
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Abstract:
Cross-year tutoring (CYT) of medical students is recognized as an effective learning tool. However, little is known about the quantitative and qualitative educational outcomes of CYT. The objectives of this study are to confirm non-inferiority of medical students’ OSCE scores in a medical interview training with CYT, as compared with those with faculty-led training (FLT), and to qualitatively explore the educational benefits of CYT. We conducted a prospective sequential mixed methods study. Fourth-year students were randomly assigned to two groups. For the CYT group (CG), teaching was delivered by a group of 6 student tutors (STs) from Years 5, who took a 60-minutes training session regarding the effective feedback. In the FLT group (FG), students were taught by a group of 6 physicians. Following the training, both groups were assessed using the OSCE. Two focus groups for four 4th-year and six STs were conducted. One hundred sixteen students agreed to participate. The OSCE scores of CG and FG were 91.4 (SD 5.5) and 91.2 (SD 5.4) respectively. The difference of the mean score was 0.2 with 95%CI of -1.8 to 2.2, which did not cross the predetermined non-inferiority margin of 3.0. Fourth-year students recognized STs as role-models; we can consider what we should learn during this one year by speculating the difference between STs and ourselves. They also felt STs secure psychological issues; they were comfortable enough to tenderly advise us from the same students’ viewpoints. Moreover, STs generated a self-reflection as learners; I felt I learned twice through the experience of teaching to junior students.

CTY is an effective educational tool for the communication skill training for medical students and enhance an interactive learning between tutors and tutees.

Title: Developing Professionalism among Undergraduate Medical Students- A Mixed Method Study Proposal

Presenter: Muhammad Nadim Akbar
Authors: Muhammad Nadim Akbar, Abid Ashar, Saadia Sultana,
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Abstract:
Background: In 2011, Islamic International Medical College in Islamabad introduced a module, PERL (Professionalism, Ethics, Research and Law), exclusively intended to teach professionalism to the students. The course of this research aims to determine the importance of formal teaching of professionalism to undergraduate medical students.

Purpose of Study: The purpose of this study is to obtain attitudes of undergraduate medical students about professionalism, who have been formally taught professionalism. And then gather an opinion of medical students about the effectiveness of different strategies used for teaching medical professionalism and how they can be improved?

Study Design: This will be a two-phase exploratory sequential mixed methods study.

Place and Duration of Study: Data will be collected in 3-4 months at Islamic International medical college, Riphah International University, Islamabad.

Materials and Methods: In the first phase, quantitative data will be collected with non-probability convenience sampling technique. A PSCOM Professionalism questionnaire based cross sectional survey will be conducted to determine the perceptions about professionalism of 1st, 2nd, 3rd and 4th year MBBS students, who have been formally taught professionalism. In the second phase, qualitative exploration through focus group discussions will elaborate the students’ opinion about the effectiveness of different strategies used for teaching medical professionalism and how these strategies can be
improved. A quantitative data will be entered into SPSS version 21. The comparison of the results between four groups of 1st to 4th year MBBS students will be carried out. ANOVA will be used to analyze the variation in the data of four different classes of MBBS. If ANOVA indicates a significant difference (P < 0.05) between the four MBBS classes in the six professionalism domains, student t test will be used to determine statistically significant differences (P < 0.05). Quantitative data about the effectiveness of different strategies used for teaching professionalism will be analyzed by thematic analysis.

Results: About the attitude of students about different elements of professionalism, their opinion about different strategies used to teach professionalism and suggestions to improve them will be presented. Conclusions: Will be drawn from the results.

Title: A Quality Improvement Project (QIP) on the use of Handover in Accordance with BMA Junior Doctor’s Guidelines and its Effect on Patient Safety

Presenter: Joel McCay
Authors: Joel McCay, Alex Werner, Arut Vijayraman
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Abstract: The GMC recognizes that handover is essential for the effective treatment of patients and improves patient safety. They state that handover between healthcare professionals should happen twice a day, be led by a senior team member, include all professionals from the multidisciplinary team and be saved in a centralized accessible document. At present these criteria are not being fully met on the majority of wards in the South Tees Trust.

Aims and objectives: To produce a trust wide standardized handover tool and handover system to maximise patient safety. Where: The project has been run across 2 trusts in the South Tees area at James Cook University Hospital and The Friarage Hospital Northalleton.

Methods: A universal handover tool was developed and trialed on a number of wards. Health care professionals were trained in how to use the new handover tool and the tasks necessary to reach GMC requirements. Following the 2 week trial period staff were given a questionnaire on whether they thought the tool improved patient safety and their responses recorded. Consultants, senior trainees, junior doctors, ward sisters, nurses, health care assistants and ward clerks were all invited to participate in the questionnaire. Things deemed most important on a handover by these staff were the following: Outstanding jobs/ Plans 22%, Patient identifiable information 20%, Presenting complaint/diagnosis 19%, PMH 10%, Resus status 6%, Other 23%.

It was recorded that 77% of staff engaged fully in the new handover. 62% of staff said that as well as a written handover a verbal handover occurred twice a day. 72% of staff thought that patient safety was improved as a result of the new handover tool/system. The following improvements were suggested: An improved IT system, A change to the written handover, Excel spreadsheet layout, Leadership in the verbal handover, Reduced duplication of information on the written handover.

Automatic update of information onto the written handover from neighboring IT systems Patient safety was improved as a result of the new handover system.

Further education into the use of written and verbal handover is needed for all ward staff, regardless of level of seniority. Junior doctors did not feel they could assert the need for verbal handover and therefore need support from consultants in order to initiate change and deal with resistance to change.

The aim is to continue this work across all medical and surgical wards at the trust addressing the areas of improvement needed.

Title: The Effect of Integration of Role-Modeling and Narration Methods on the Midwifery Students’ Performance in Professional Ethics

Presenter: Hoda Ahmari
Authors: Hoda Ahmari, Ahmad Kachoie, Boshra Ahmari, Tahmineh Dadkhah, Ahmad Parizad, Zahra Jafary Nodoushan
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Abstract: Introduction: Midwifery care based on the professional ethics leads to mothers' increased prosperity and satisfaction. This study was performed to compare the effect of integration of two teaching approaches, rolemodeling and narration methods, on the midwifery students’ performance in professional ethics in Qom University of Medical Sciences.
Methods: This quasi-experimental before- and after- two group study was performed on all midwifery students (N=36) assigned randomly to the experiment or control groups. All were enrolled in Maternal Child Health Course, as a clinical rotation. For the experiment group, professional ethics issues were taught by role-modeling and narrative methods, while the control one experienced only the role-modeling technique. Students’ performances in professional ethics in both groups were assessed before and after the instruction using a researcher-made observation checklist (score range: 0-27). Data were analyzed using independent t and paired t-tests.

Results: Mean scores of students’ performance in control group was improved significantly in post test (16.85±1.39) compared to the pretest (12.34±1.42) results (t=.71, p=.001). Also in the experiment group, post test scores (20.85±2.39) were significantly different from the pretest (11.96±1.89) findings (t=.82, p=.001). Independent t test implied that the difference of post test scores in two groups was significant (t=0.8, P=0.000).

Conclusion: Although both methods were effective in improving students’ performance in professional ethics in clinical setting, a blend of two methods (narration and role modeling) was more effective than role modeling alone. It is recommended that role-modeling and narration methods be used in teaching ethical issues to midwifery students.

Title: Barriers to Interpersonal Communication

Presenter: Shazia Riaz
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Abstract:
Background: There are many reasons why interpersonal communications may fail. In many communications, the message (what is said) may not be received exactly the way the sender intended. It is, therefore, important that the communicator seeks feedback to check that their message is clearly understood. The skills of active listening, asking clarifying questions and reflection may help but the skilled communicator also needs to be aware of the barriers to effective communication and how to avoid or overcome them. There are many barriers to communication and these may occur at the level of sending message or receiving it in the communication process. Barriers may lead to your message becoming distorted and can cause confusion and misunderstanding.

Method: This cross section study was conducted on participants of MHPE (master in health professional education) programme. We designed an activity, there were 25 participants, we divided them into 5 groups and they were asked to select a leader from amongst themselves. We instructed the group members that they had to reproduce whatever their leader told them to draw.

Results: out of 25 participants, 30% participant stated that the leader was not able to communicate well, 20% % participants stated that sender did not know the correct terms or used unfamiliar terms, 30% participants blamed for the noise in the room and 10% students stated that there were insufficient instructions by the trainer about whether questions can be asked to the leader and 10% participants acting as leaders stated that clarifying question were not asked.

Conclusion: Effective communication involves identifying and overcoming the barriers to convey a clear and concise message. Identification of these barriers is thus of prime importance in general as well as in context of teacher- learner or doctor- patient communications.

Title: Teaching Professional Ethics and Law to Medical Undergraduates in Pakistan: Existing Practice and Future Perspective

Presenter: Shahina Yasmin
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Abstract:
The lack of knowledge regarding ethics and law in clinicians and increasing ethical issues necessitate formal teaching in medical curriculum. The global consensus to inculcate ethics is reflected by its highest rank in curricular objectives of professional regulatory bodies and institutions. Various curricula were designed internationally to meet societal expectations of ethical conduct. The guidelines by Pakistan Medical and Dental Council (PMDC) do not suggest any course or curricular content. The study aims to evaluate the existing teaching of professional ethics and law in Pakistan, the viewpoint of teaching faculty and fresh graduates and suggest module outline for integrated curriculum. A self designed
Objective: To investigate medical students’ perception about professionalism teaching in the undergraduate medical curriculum. The present cross-sectional study was carried out among 464 medical students of various years of Faculty of Medicine, King Abdulaziz University, Jeddah, Saudi Arabia. A validated questionnaire was used for collecting data. The data was analyzed on SPSS v21.

Out of 464 medical students 58.6% of the participants were females and 41.4% were males. Majority of the students (74.8%) were agreed that medical professionalism can be taught and learned. A question about the quality of teaching professionalism in the academic years, 27.6% responded that it is adequate while 29.5% considered it inadequate and 6.7% considered it very deficient. A question about facing the professionally challenging situations (behaviors or conflicts) during their training in the medical college, more than half of the students had suffered such situations while 8.2% never faced such situation.

Majority of the students (66%) expressed that there is no process for evaluating students’ acquisition and development of professional behavior, during either preclinical or clinical years of training. A question about how professionalism is dealt with in the curriculum?, respondents gave various reasons, 9.7% expressed during orientation or a white-coat ceremony, 32.2% reported in a single course, 18.1% said as a component of multiple courses, 39% in an integrated sequence of courses. The perception of the medical students towards professionalism is good but there is need to give more emphasis on professionalism in the curriculum.

Title: Moral Reasoning among Dental Students in Makkah Region, Saudi Arabia

Presenter: Suad Alsubaihi
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Abstract: Moral reasoning refers to the cognitive process that takes place to judge about right and wrong when facing moral situations. Understanding this process and its influencing factors is very important for educators since one of their major roles is to prepare students for taking the right ethical decisions during academic and clinical life. The theoretical framework of this study based mainly on Kohlberg’s moral development theory. Kohlberg argued that the reason used to defend the moral decision taken is more important than the action itself. His theory assumes that moral development occurs through cumulative stages that progress in the same sequence and manner in all individuals. Kohlberg believed that cognitive development is a necessary but not sufficient condition for the development of moral reasoning, which means that the level of moral reasoning could be affected by other external social, cultural, and educational factors.

Kohlberg theory includes three levels (pre-conventional, conventional, and post conventional) that comprise six stages. Each successive stage represents a higher level of moral reasoning. Despite that several studies examined moral reasoning in Saudi Arabia from psychological perspective, but no local literature were found in the field of medical or dental education.

Aim: The aim of this study is to evaluate the level of moral reasoning of 6th year dental students in Makkah Region in Saudi Arabia. The study will help dental educators to know where they are
standing exactly from moral development and subsequently to assess the effect of current dental curricula on students’ moral personalities. An observational cross sectional survey was conducted among 267 students. The sample included all 6th year dental students in three dental schools in Makkah region. Participants were asked to complete an Arabic, validated version of Socio-moral Reflection Objective Measure (SROM). It is a self-administered, paper and pencil questionnaire which composed of two hypothetical moral dilemmas with 13 issue statements. These statements have a specific correction scale that matched with Kohlberg’s six-stage moral development system.

The students’ perception towards some educational context a factor was also assessed (instructional methods, role modeling, learning environment, and the effect of ethical exposure in the curriculum).

SPSS version 21 was used for data entry. Age of participants was represented in mean ±SD while other categorical variables were represented in frequencies and percentages. Chi-square and Fisher’s Exact tests were used for inferential statistics where differences are considered significant at P value < 0.05.

A total of 188 (70%) out of 267 students responded to the SROM. Sixty one instruments were excluded according to Gibbs’s standard consistency checks. A usable response rate of 127 students was returned for analysis.

The majority of the students with a percentage of 63.8% (n=81) were in stage three (the instrumental concordance orientation). Individuals at this stage judge about right and wrong based on what will secure their approvals and maintain their mutual relationships.

Stage 4 (Authority and Social- order Maintaining Orientation) was achieved by 35 % (n=44) students, in which individuals start to perceive themselves as members of the social system. The right behavior at this level is the behavior that fulfills one’s duties and follows the rules rigorously. Two students with percentage of (1.6 %) score in stage 2 (the instrumental relativist orientation). No single subject of the respondents could achieve stage 5 or 6.

Fisher’s Exact Test was used to assess the association between moral reasoning stages and the students’ perception towards some educational contexts variables. Students’ perception was assessed towards having relaxed and encouraging learning atmosphere, being actively engaged in learning, being treated respectfully by their teachers, and having their teachers as role models regarding treating patients ethically and professionally. The last assessed factor was students’ perception towards ethics course and its usefulness for their future career. No statistically significant association was found between moral reasoning stages and the assessed educational contexts variables at P value < 0.05. The assessed level of moral reasoning is considered low for students of their age and in higher education, particularly in a health profession specialty. Globally, stage 3 is the dominant stage among most adolescents.

Being able to make the right ethical decisions in such humanistic careers necessitates individuals’ ability to differentiate themselves from their own interests and their social relations. We would argue that this level of students’ moral reasoning may threaten their future profession, and we would recommend stage 5 of Kohlberg’s moral development system as a learning outcome and as a minimum acceptable stage for graduating dental students.

This low level of moral reasoning may reflect a deficiency in the education system in general or in the dental education in particular. The current dental education emphasizes clinical skills more than moral education.

Other factors that could explain the low level of moral reasoning may be attributed to hidden curriculum, instructional strategies, students’ relations with their peers or their instructors, and social and environmental context factors. One important limitation to this this study is that it provides an idea about moral reasoning but not about moral behavior. In spite of this limitation, this study provided an initial step towards investigating moral reasoning in Saudi Arabia from a dental education perspective. The relatively low level of moral reasoning among 6th year dental students indicates that further longitudinal and interventional studies are needed to investigate the factors affecting students’ moral reasoning abilities and the impact of dental curricula on moral development.
Title: The Effects of Intervention Based on Supportive Leadership Behavior on Iranian Nursing Leadership Performance: A Randomized Controlled Trial

Presenter: Mandana Shirazi
Authors: Mandana Shirazi, Amir Hossein Emami, Seyed Jamali Mirmoosavi, Faeze Belgi, Hadi Zamanian, Italo Mascielo
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Abstract:

Background and Aims: The effect of transformational leadership on SLB in nursing management is emphasized. The purpose of this study is to assess effects of workshop on supportive leadership behavior (SLB) on performance of head nurses.

Methods: This Randomized Controlled Trial (RCT) was conducted on 110 head nurses working at university hospitals. They were randomly assigned in two control and intervention groups. The head nurses in the intervention group participated in supportive leadership training, but the control group did not. Performance in supportive leadership was assessed with a validated instrument with six subordinates (n = 731).

Results: There was a significant difference between SLB scores of baseline and three months follow-up (p<0.0001). Moreover, the post-intervention scores were significantly higher in intervention group, compared to the control group (p<0.0001). The results showed greater effect sizes in males of intervention group (50%) than females (36%) and greater effect size for married participants (42%) than singles (37%).

Conclusions: The interactive multifaceted training workshop on supportive leadership behavior, improved leadership performance of head nurses. As Health policy decision makers should apply SLB, which is a significant leadership style, to improve the outcomes in other groups of health care management, such as physicians. It is recommended to investigate the effects of such workshops in longer periods of follow up.

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Title: Video of Behavior Management Techniques as a Tool for Dentistry Students Practice

Presenter: Renata A Salvitti de Sa Rocha
Authors: Renata Andrea Salvitti de Sa Rocha, Gustavo Sattolo Rolim, Antonio Bento Alves de Moraes

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Title: The Need for Communication and Health Advocacy Education for Medical Profession

Presenter: Perihan Torun
Authors: Perihan Torun, Osman Hayran, Nüket Güler Baysoy, Ceyda Acar
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Abstract:

Background and Aims: The aim of our study was to examine the opinion and attitudes of a group of medical students and medical residents toward the

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Abstract:

Background and Aims: In dental treatment context, fear and anxiety can be present, and may lead to avoidance of dental care or disruptive behavior during treatment. The pediatric dentist shouldn’t be restricted to technical learning of a specific area, but should have also adequate training to deal with disruptive behavior. Behavior management must be part of dentist’s training programs, and it is important to assess the new teaching tools available to achieve this goal.

Methods: Four dental students and their patients participated in 64 dental treatment sessions. The sessions were directly observed by the researcher, and the events were registered. The pre-session video lasted 6 minutes and was shown to the student through a Samsung Tablet (SM-T320) before the patient arrived. The design was reversal: (A) Sessions 1, 2 and 3 - baseline (B) 4, 5, and 6 - video presentation prior to treatment, (A) 7, 8, and 9 - usual treatment (B) 10, 11 and 12 video presentation prior to treatment and (A) 13, 14 and 15 - usual treatment, and 1 follow up session, 1 month after last session. For behavior events registration, event sampling methodology was used.

Results: The use of behavior management increased after video sessions. The most widely used technique was Tell-Show-Do, followed by Distraction and Time Structuring. In sessions with more use of behavior management, children actively participated and asked for specific techniques.

Conclusions: The use of a video shown before treatment was an effective teaching tool to increase the use of behavior management techniques, and the patient’s participation in dental sessions.
**Title:** Clinical Capability Self-Appraisal as Indicative of Preparedness for Future Medical Practice – A Graduates’ Perspective

**Presenter:** Afsheen Zafar  
**Authors:** Afsheen Zafar, Ahmed Rehman  
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**Abstract:**

**Background and Aims:** Pakistan is one of the countries which are experiencing a wave of change in undergraduate medical curricula. These changes have successfully focused on the integration of the basic and clinical sciences leading to emergence of outcome based curricula. However the extent to which outcome based curricula prepare the graduates for future clinical practice has not been well studied. The aim of the study was therefore to identify the self-perception of Pakistani medical graduates regarding their preparedness for hospital practice in medical schools.

**Methods:** Recently graduated doctors of Islamic International Medical College were asked to fill up the clinical capability questionnaire to assess their perception of how the medical school prepared them for the actual practice that they encountered during their house job. The original clinical capability questionnaire designed and validated by Hill et al. (1998) was modified to include the domains of practical skills and patient management, holistic care, prevention, interpersonal skills, confidence/coping skills, collaboration and self-directed learning. The survey assesses the perception of the graduates regarding their medical school’s educational relevance to practice. The survey consisted of two parts. The first part consisted of 46 questions under four subscales namely clinical skills, procedural skills, operational management and administrative tasks. Students were asked to rate their perception of their capability to perform a task on a five point scale that ranged from ‘I did not try the skill during Medical School or Internship’=0, ‘I tried the skill but I cannot perform it’ =1, ‘I tried the skill and I can perform it supervised’=2, ‘I tried the skill and I can perform it unsupervised’=3, to ‘I tried the skill and I mastered it’= 4. Responses of 3 or 4 were considered as evidence of good capability. The second part consisted of 25 items for 6 subscales related to the rest of the domains of the clinical capability questionnaire and ranked the student responses on a scale of 1 to 5 where 1 represented ‘very inadequately’ and 5 ‘very adequately’. Responses marked 4 or 5 were taken as adequate preparation in medical school. The survey findings were analyzed using SPSS version 23.

**Results:** 43 students participated in the study. The Cronbach’s alpha coefficients for each subscale in both parts ranged from 0.836 to 0.965 indicating good internal consistency of the items in the subscale. The majority of students reported good capability in clinical skills (median= 3, IQR=0) but rated themselves lower on procedural skills (median= 2, IQR=1), operational management (median= 2, IQR= 1), and administrative tasks (median= 0.5, IQR= 1). For rest of the 6 domains, student rated an average preparation in the holistic care (mean= 3.1 ± 1.1), collaboration/team work (mean= 3 ± 1.1), prevention (mean= 3± 1.2), and self-directed learning (mean= 3± 1.3) while they reported inadequate preparation in confidence/coping skills (mean= 2.9± 1.2) and interpersonal skills (mean= 2.8± 1.2)

**Conclusions:** Graduates perceive that their preparedness for hospital practice is adequate in clinical examination skills. Procedural skills, administrative skills, confidence/coping skills and interpersonal skills require more emphasis in the undergraduate curriculum.
Title: The Impact of Peer Assisted Learning Associated with Team Based Learning in Dental Education

Presenter: Sausan Al Kawas
Authors: Sausan Al Kawas, Hossam Hamdy
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Abstract:

Peer assisted learning (PAL) is one of many educational strategies that can assist students’ learning and their professional development. Furthermore, it provides additional help for borderline students without overburdening the busy faculty 1. The aim of this change project is to evaluate the impact of PAL associated with Team Based Learning (TBL) on the learning experience of dental students. The objectives of this project are to develop a pilot module of PAL initiative using TBL as the main approach of teaching, and to evaluate students’ perceptions of PAL when combined with TBL as an educational strategy to enhance dental students’ learning. In order to guide the change process the Health Service Executive (HSE) Change model because it is cyclic and it takes into consideration people changing 2. The HSE Change Model describes the journey of transformation that enables people to move from the current situation to the desired future, in line with a shared vision for change. CIPP evaluation model were used to evaluate the change project. The CIPP model 3 addresses all phases of an education program or change implementation: planning, implementation, and a final retrospective assessment by alternately focusing on program context, inputs, process, and products. A structured on-line questionnaire was sent to 42 students to evaluate their perception regarding the impact of PAL on their learning experience. 16 students were chosen to participate in focus group interviews and emerging thematic analysis was conducted. The results indicated that participants found PAL/TBL initiative as an effective strategy of teaching which modified the way of students’ studying. It was an interesting and enjoyable learning experience in a stress-free and non-threatening environment. It also improved students’ teaching skills and motivated them to study harder. In addition, it helped improving students’ communication skills and increasing their self-confidence. In general students stated that they had a positive learning experience and they would recommend PAL/TBL to be implemented in all courses in the college. Overall the evaluation reflected that the aim and objectives of the project were achieved. Overall the evaluation reflects that the aim and objectives of the project were achieved. Our findings suggested that PAL initiative associated with TBL is a valuable strategy to enhance learning among students. It can also provide students with teaching opportunity which could help in developing professional attributes needed in their future careers.

Title: The Situation of Bedside Teaching

Presenter: Quratul Ain Tahira
Authors: Quratul Ain Tahira, Sidrah Lodhi, Sajid Abaidullah
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Abstract:

Decline in bedside teaching is one of the problems that medical education is facing today. It has always been the best modality for effectively imparting clinical skills. Studies have shown that it has declined in the past few decades. (1, 2) Various factors notably advancing medical technology are in essence phasing out bedside teaching. (3) Our study was aimed to assess the adequacy of bedside teaching on medical floor. This cross sectional study conducted in May 2015 in Mayo Hospital, Lahore included 152 trainee doctors, who gave feedback about various aspects of bedside teaching via a self-administered performa. Bedside teaching was considered adequate if its various aspects were carried out in at least 70% sessions per week. Responses of house officers and postgraduates were compared by t-test. P-value < 0.05 was taken as significant. On average, there were 2.5 bedside teaching sessions/week with mean score of 35.19+/14.02(43.99%). Lower score was awarded by postgraduates (39.47%) than house officers (47.74%) with p value of 0.03. There was no gender bias in the perception of bedside teaching. Bedside teaching on medical floor is inadequate at present.

Title: Acquisition of Basic Surgical Skills (BSS) in UK Foundation Doctors

Presenter: Naji Al-Khudairi
Authors: Naji Al-Khudairi, Ammar Abdullah
Institute: Bedford Hospital NHS Trust, Bedford, UK
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Abstract:

Background: The UK Foundation Programme Curriculum states all Foundation Doctors (FD) working in a surgical specialty or A &amp;}
Title: Hybrid Simulation Improves Self-Efficacy for Communication Skills Training in End-of-Life Care

Presenter: Chih Wei Yang
Author: Chih Wei Yang
Institute: National Taiwan University Hospital, Taipei, Taiwan
Email: cwyang0413@gmail.com

Abstract:
Background and Aims: Hybrid simulation (combined high-fidelity simulators and standardized patients) training was put more and more emphases for communication skills in end-of-life care. This before-and-after study conducted in National Taiwan University Hospital (NTUH) was to demonstrate effectiveness of hybrid simulation on communication skills training in end-of-life care.

Methods: In NTUH, all first-year internal medicine residents were all invited to attend the hybrid simulation training before they started their clinical rotation in ICUs. There were two scenarios simulating end-of-life cases in ICUs for each trainee. For each scenario, trainees were exposed to a 20-minute high-fidelity simulator-based simulation of end-of-life cases, followed by encountering a 10-minute communication with patients’ family who are played by trained actors. Standardized questionnaires with 5-point Likert’s Scale were applied to assess self-efficacy of each trainee after each encounter with family. Audio-visual assisted feedback was provided after each encounter.

Results: During 2011-2014, there were totally 93 residents completing the courses and included for study. Global rating of self-efficacy of communication skills were higher during second encounter (3.19 vs. 2.97, p &lt; 0.05). Among items, trainees showed significantly better self-efficacy in respectful opening, open-ended question in, responding to emotion, and shared decision making.

Conclusions: Hybrid simulation is an effective learning strategy for communication skills training for end-of-life care.

Title: Effect of Preclinical Skill Lab Training on Clinical Skills of Students during Clinical Years

Presenter: Saadat Ali Khan
Authors: Saadat Ali Khan, Madiha Imran
Institute: Foundation University Medical College, Rawalpindi, Pakistan
Email: sasaali3y@gmail.com

Abstract:
Clinical Skill Lab (CSL) training was introduced at Foundation University Medical College (FUMC) in 2012. A part from basic medical sciences (BMS) teaching, 1st year MBBS students were introduced to weekly sessions of clinical skills supervised by qualified faculty. Integration of clinical & preclinical teaching results in improvement of clinical acumen and BMS understanding. Keeping this in view, it was aimed to determine the efficacy of CSL training during preclinical years on acquisition of clinical skills through self-perceived proforma by the medical students.

Methods: A descriptive pilot study was carried out at, FUMC. 4th year students who had received CSL training were compared with the final year
students who had not received CSL training based on convenience sampling. Evaluation proforma were given. Students graded their clinical skills between non-satisfactory to excellent based upon recall.

**Results:** 26 out of 30 students responded. 11 were from final year and 15 from 4th year. 67% 4th year students considered CSL sessions benefitted them in ward learning and 73% rated their history taking and general physical examination skills as good and very good. 18% of final year graded theirs as good. For systemic examination and basic life support, 66% of 4th year and 36% of final year graded them satisfactory. Evaluation of overall ward performance was rated very good by 60% of 4th year and 36% of final year students. However, 33% of 4th year students rated excellent while none from final year. Improved communication skills were observed by 53% of 4th year and 45% of final year students. 53% from 4th year and 36% from final year felt improvement in confidence level.

**Conclusions:** CSL sessions during preclinical years greatly benefit the students in clinical years, to improve overall performance, communication skills and confidence level in wards.

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**Title:** 360 Degree Approach of Lecture Hall for Teaching

**Presenter:** Shahina Yasmin

**Authors:** Ashfaq Akram, Shahina Yasmin, Farzana Rizwan, Robina Shaheen

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

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**Abstract:**

**Background:** Delivering an effective lecture is a dilemma for many lecturers especially when the class size is large. Much has been explored on teaching methodology but less has been focused on design of lecture halls and laboratories used as venue for large sized classes. Aim: to suggest a new architerual design of lecture hall to produce a small size class affect.

**Method:** The new architectural design of lecture hall meant for large size class is 360 degree. The teacher’s site called source of information (SOI) is in the middle. Around the SOI, the seating arrangement for students is in a complete circle rather than ordinary rectangle or D shaped lecture halls. This design is also applied for laboratories reserved for large size class teaching.

**Result:** This design (as hypothesis) shrinks half of the seating area and would transform the large size class into a small size class. This would enhance to monitor the students and more likely to be easy to interact with students who use to sit on backbenches and keep their distance quite far from teachers in traditional teaching method.

**Conclusion:** 360 degree lecture hall may likely to be effective but a pilot study is suggested to assess the reliability of this architectural design.

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**Title:** Designing Effective CME Considering Potential Barriers to Practice Change

**Presenter:** Safarnavadeh Maryam

**Authors:** Shirazi Mandana, Safarnavadeh Maryam, Parikh SV, Dadgaran I, Silen C

**Institute:** Ministry of Health, Treatment and Medical Education, Dadman, Iran

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**Abstract:**

**Aim:** The main aim of current study is to explore General Physicians’ (GPs’) micro level obstacles of behavior change which affects their diagnosis and management of Depressive Disorders following their participating in Continuing Medical Education (CME) program. In this qualitative study, semi-structured interviews were done to explore GPs’ perceptions and experiences regarding diagnosis and treatment of depression. A purposeful sampling was carried out among GPs, previously participated in an educational intervention study, to obtain a broad range of views. Eleven GPs were interviewed and their views were probed in depth to get rich descriptions. The data were analyzed using qualitative content analysis. GPs’ perception regarding micro level barriers emerged as two important themes individual and contextual factors. The Individual themes included: educational and professional and the contextual them included: psychological disorders and work place categories. As to the results, two groups of GPs, those who did change and had a positive perception of the CME program they participated in three years ago, and those who did not change, had different perception regarding barriers. Micro level obstacles play a great important role in managing patients with depressive disorders. In order to improve effectiveness of CME events, they should be tailored to individual and workplace issues i.e. individual and contextual factors should be addressed.
Title: TBL VS Didactic Lecture: What Do Test Scores Say?

Presenter: Shirza Nadeem
Authors: Shirza Nadeem, Tanzeela Khalid, Muhammad Aslam, Sundas Tanig
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Abstract:
To compare Team Based Learning with didactic lecture in undergraduate Forensic Medicine & Toxicology course as reflected by students' test scores.

Study Setting and Study Population: Third year MBBS students attending Forensic Medicine & Toxicology course at University Medical & Dental College, Faisalabad.

Study Design: Quasi-experimental design
Methodology: A 3rd year undergraduate class of 66 students was divided voluntarily into two groups. Group 1 was taught by didactic lecture & group 2 took Team Based Learning as their main instructional tool. Two instructors of equal qualification were involved as main facilitators for teaching the topic of Thermal Burns. A written assessment comprising of both multiple choice questions (MCQ) & short essay questions (SEQ) was conducted four days later. The assessment scores of both cohorts were compared. The quantitative data was analyzed using SPSS version 19. Mann-Whitney Test was used to compare the two groups. P-value of ≤ 0.05 was taken as statistically significant. The performance of students in the SEQ component of TBL group was significantly higher as compared to the lecture group. (p=0.000)

The performance in MCQ of TBL group was highly significant as compared to the lecture group. (p=0.001)

Similarly, the overall performance of TBL group was significantly higher as compared to the lecture group. (p=0.000) Team-based learning is much better teaching methodology as compared to didactic lectures. Therefore, Team-based learning should be incorporated as an effective instructional tool in the medical curriculum.

Title: Effect of Mayer’s Multimedia Principles on Learning of Medical Parasitology

Presenter: Jyoti M Nagmoti
Authors: Jyoti M Nagmoti, Sheetal U Harakuni
Institute: K L E University's J.N Medical College, Kamataka, India
Email: jyotinagmoti@yahoo.com

Abstract:
Computer assisted learning has become a significant part of medical school curriculum in the recent times. Most of the medical teachers use power point in its default mode which in fact, is known to cause boredom and ineffective learning. Research evidence on student instruction has demonstrated considerable improvement in short term memory after applying multimedia design principles. However, there is paucity of such evidence in medical education. Thus we set out to apply multimedia principles while designing and teaching parasitology to the second year medical students. We evaluated its effect on students’ learning enhancement, so that medical educators can be encouraged to adapt the best instructional practices.

A batch of 128 second year medical students received four lectures on various parasites. First two lectures employed traditionally designed PPT slides whereas, the next two used the slides designed based on multimedia principles. Students answered an objective type of pre- post test at the end of each lecture and an essay type test at the end of six months. These tests assessed short and long term knowledge gain respectively. Students’ perceptions on quality and content of lectures were collected and analyzed.

Both short and long term knowledge gain was significantly higher on the contents learnt through modified lectures as compared those learnt by traditional ones (p=0.019, p=0.001 respectively). Majority of the students welcomed and appreciated the modified classes. Departing from PPT default mode and applying multimedia design principles to teach parasitology can enhance short and long term knowledge gain and enhance students’ cognitive skills. Hence there is a need for practice of Multimedia principles to enhance student learning.

Title: Retention of Life Saving Skills: Examining Feasibility of Overlearning

Presenter: Musarrat UI Hasnain
Author: Musarrat UI Hasnain
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Abstract:
Cardiac First Response Course (CFR) is the Irish version of the course on Basic Life Support (BLS). Basic life support courses are valid for two years, however, a substantial body of literature indicates limitations in retention of skills. Overlearning has been shown to have a positive impact on retention.
of knowledge and skills. Previous studies also show a great variability in the effect of overlearning in different skills. This study was conducted to determine the feasibility of studying impact of overlearning specifically on CFR so that a strategy for longer retention of life saving skills can be identified for incorporation in training programmes. The study used a quasi-experimental design to compare the scores of control and experimental group (50% over-learning) from final year students of Punjab Medical College undergoing the CFR course with 60 students in each group. Both groups completed two days standardized training and underwent the MCQ and skill test using the prescribed checklists for adults and infants. Experimental group practiced the skills for additional 2 hours amounting to 50% overlearning. Both the groups completed the same set of MCQs and skill tests after six weeks. Data were analyzed using SPSS version 15 and independent t test was performed for comparison of scores on the MCQ and skill test. In first administration of test (time 1) the mean MCQ scores were22.8 (n=60) and 21.92 (n=60) for the experimental and control groups respectively which decreased to 19.20 (n=50) and 16.15 (n=53) respectively with a p value=. 008 upon the second administration after six weeks (time 2). On the skill test the mean score of the experimental groups’ adult skill set was 101.42 (n=50) and that in control group was 97.79 (n=53) with p value=. .008 in the 2nd time test. Important skills like chest compressions showed better retention in the experimental group. Over-learning resulted in better retention of both knowledge and procedural skills of the CFR course in the experimental group compared to the control group after six weeks of non-use. This is a useful area for further research for addressing the need of retention of procedural skills.

Title: Introducing Integrated Learning Program (ILP) in an Indian Dental School- A Case Study

Presenter: Vasanti Jirge

Authors: Vasanti Jirge, Meenaxi Umarani, Anjana Bagewadi, Alka Kale, Lagali Jirge

Institute: KLE Vishwanath Katti Institute of Dental Sciences, Belgaum, India

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Abstract:

Dental education in India is taught in a traditional discipline based manner. Dental education globally has undergone many curricular changes and integration of subjects has been widely accepted due to many reported benefit. Our dental school has been proactive in implementing reforms in educational activities. We felt that it was necessary to introduce integrated teaching learning program and stay updated with reforms occurring worldwide. With permission from the University and the Principal several meetings were arranged with faculty members, department heads and the academic review committee. A committee was set up to oversee the planning and implementation of ILP. A faculty development workshop was conducted for all the teaching faculty of the dental school. Instructors of concerned departments prepared lesson plans and conducted the modules. The ILP committee oversaw arrangements for class hours, and assisted the instructors in the planning of these modules. After these modules were conducted feedback was taken from the students and staff.

Most students felt that the integrated teaching sessions were interesting and they were able to understand concepts better. Since there was increased interaction between students and teachers the experience of conducting these sessions were taken positively by both teachers and students.

Reforms in dental education in India are greatly overdue. Curricular reforms are a big challenge. We have made an attempt to introduce change. We will be introducing assessment methods to determine the impact of integrated and plan to divide the class into smaller groups. Over the next few years we will phase in the ILP incorporating all the necessary changes taking ideas from literature on similar programs that are being conducted in other dental schools.

Title: Training of Degenerative Disease Management for Health Students with Interprofessional Collaborative Approach in Universitas Gadjah Mada, Indonesia

Presenter: Dhania Novitasari


Institute: Universitas Gadjah Mada, Indonesia

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Abstract:

Hypertension is already known as one of noncommunicable diseases (NCDs) that having high incidence in Indonesia. However the health service for the hypertension therapy it not very optimal. Thus, the students from seven disciplines,
Title: Identification of Slow-Learner among the Dental Undergraduates

Presenter: Pratibha A. Patil
Author: Pratibha A. Patil
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Abstract:
For most children whose progress causes concern in school, the problems are to do with experience and learning rather than intrinsic intellectual deficits. Prevalence of slow-learner is 12-30% in school children, but this issue has not been addressed in context with health professional or adult learner. Students with different capacities get enrolled in this profession. The lack of comprehensive assessment of students leads to the admission of students who may be a slow learner. This slow learner if left unidentified will lack the professional competency Hence this study aims at identification of a slow learner through a comprehensive assessment of a student which including previous academic performance, cognitive, psychomotor and affective domains. This is a pilot study conducted on six final year undergraduate students of KLE VK Institute of Dental Science. The validated checklist to assess the students was distributed to the clinical incharge of eight departments. The checklist had a total of 29 items. Factor analysis was applied to find the relative contribution of each domain to predict a slow learner. The mean cognitive, affective and psychomotor scores were 12.63, 9.83 and 6.97 respectively. On factor analysis of each items of the three domains it was found that the items of cognitive domain contributed the most for identification of slow learner. This instrument helped us to identify a student as slow learner, also helped us to predict the domain that contributes the most. We can tailor the instructional methods, to achieve the predetermined competency of a learner and to tailor the best remedial method too, which facilitates learning among slow-learner.

Title: Comparison of the Effect of Lecture and Concept Mapping Methods on Students’ Learning and Satisfaction

Presenter: Hoda Ahmari
Authors: Hoda Ahmari, Ahmad Kachoie, Ruhollah Safaeipour, Esmaat Jafarbegloo, Azam Heidarpour
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Abstract:
Introduction: Promoting meaningful learning is one of the main objectives of education and an important factor in promoting creative thinking, critical thinking and problem-solving abilities in learners. Also, evaluating students’ learning is a teachers’ duty. The aim of this study was to compare the effect of teaching by lecture or concept mapping on cognitive learning levels of midwifery students and their satisfaction with concept mapping as the assignment.

Methods: In a quasi-experimental study, 35 third-semester midwifery students in “maternal and child health” course were selected by census method. Students received education using lecture or
concept mapping (using web-based tools), respectively, for 8 sessions in 2 months. Two researcher-made questionnaires were used for assessing their knowledge and satisfaction. The collected data was analyzed using descriptive statistics and independent t-test. Results: Compared to conventional teaching, the concept mapping method had a significant effect (p=0.001, t=3.24) on promoting high levels of cognitive levels (meaningful learning). However, there were no significant differences between the two methods regarding lower cognitive domains (p=0.06). Also, among various forms of assignments, drawing a concept map received the highest score (0.95 out of 1).

Conclusion: Considering the positive effect of concept mapping method on students’ meaningful learning, it is recommended this method be employed in teaching and also in student assignments for courses which require a deep learning and high level of understanding.

Title: SOAP Format as a Tool to Enhance Learning

Presenter: Fahd Mudassar Hameed
Author: Fahd Mudassar Hameed
Institute: Islamic International Medical College, Riphah International University, Islamabad, Pakistan
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Abstract:

Background and Aims: SOAP format i.e., Subjective, Objective, Assessment, Plan Format was derived from the Problem Oriented Medical Record from Lawrence Weed in 1968. The purpose of the SOAP was to enhance recording the pertinent findings, conclusion and patient management plan. Since then it has been in wide spread use. Although considered as useful avenue, it has been found that there is a gradual decline of Bed side teaching. While students are encouraged to communicate and manage real patients, SOAP format recording by medical students may prove as a valuable tool to enhance students learning and communication with the real patients. The presentation of the SOAP to fellow Students acting as preceptors and the feedback provided by the student ‘preceptor’ would increase the students ability to critically analyze the information while promoting peer assisted learning.

Methods: Students selected for this study were among the Final year medical students during their General surgery Clerkship rotation. At the start of their rotation, students were asked to fill a Performa to record their knowledge and previous exposure to SOAP format, their confidence in seeking relevant information from patients. Students were then briefed about SOAP format. This was followed by daily sessions of Recording SOAP and presenting of this Information/analysis obtained by medical students to other medical students acting as preceptor. Consultants were also there to monitor and to facilitate the learning process. Record was made of adequacy SOAP taken by individual students and of adequacy of the students acting as a preceptor. At the end of the rotation the students were asked once again to fill the same Performa and give additional feedback about this Learning oriented SOAP presentation.

Results: The ability of the students to record the patients’ data improved. Their communication with the patients improved. It was also found that their level of understanding the patients’ management improved.

Conclusions: SOAP format recording by medical students and its presentation in morning rounds is an excellent tool to enhance students’ knowledge, skills and attitude and their ability to manage surgical patients at the bed side.

Title: Barriers to the Remediation of Struggling Learners: A Qualitative Study

Presenter: Sara M Krzyzaniak
Authors: Sara M Krzyzaniak, Jeannette Guerrasio
Institute: University of Illinois, College of Medicine, USA
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Abstract:

Health professions trainees are expected to accomplish educational milestones to achieve competence appropriate to their level of training. When learners do not meet expected milestones, they require remediation. Experience tells us that after a learner is identified as struggling, there is often a delay in the implementation of a remediation plan. This study was designed to better understand faculty perspectives on remediation, including the barriers to the implementation of a remediation plan for struggling learners.

We conducted 7 semi-structured focus groups comprised of 19 medical educators. Participants were asked to describe their experiences with remediation. Each focus group was audio-recorded and transcribed. The authors each developed an initial coding scheme from the first two transcripts using both inductive and deductive techniques. These schemes were compared and common emergent categories were identified to
Title: Can Teaching about Clinical Audit in General Practice Setting and Assessing Outcome of this Process, Improve Understanding of Clinical Audit Among both Students and General Practice (Gp) Supervisors?

Presenter: Niral Shah
Authors: Kirsty Douglas, Charles Sleiman, Niral Shah
Institute: Australian National University, ANU Medical School, Canberra, Australia
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Abstract:
An educational module with an online component has been developed. This is being piloted in teaching general practices in July and August with GP supervisors and registrars. Participants will be tested on knowledge and sense of efficacy in conducting clinical audit prior to and at the end of the pilot. At the end of project, semi structured interview and survey will be organised to test usability and effectiveness of educational resources and ascertain whether this is an effective way to move forward. We are hoping to translate our learning to roll out a pilot project involving 3rd year long term rural medical student in 2016, followed by whole of the 3rd year roll out in year 2017.

Introduction: The ANU Medical School has recently reviewed its teaching of clinical audit project of 3rd year medical students. The plan is that, in future medical students clinical audit projects will be supervised by GP supervisors during their clinical attachments in a model adapted from the University of Notre Dame, Western Australia. As a proof of concept, this program is being piloted with a small number of GP supervisor supervising GP registrars as closest comparator for medical student. We wish to test if this is accepted as a good learning opportunity by registrars and GP supervisor’s and also is effective in improving their knowledge and confidence about conducting clinical audit in their future clinical practice.

Methods: An educational module with an online component has been developed. This is being piloted in teaching general practices in July and August with GP supervisors and registrars. Participants will be tested on knowledge and sense of efficacy in conducting clinical audit prior to and at the end of the pilot. At the end of project, semi structured interview and survey will be organised to test usability and effectiveness of educational resources and ascertain whether this is an effective way to move forward. We are hoping to translate our learning to roll out a pilot project involving 3rd year long term rural medical student in 2016, followed by whole of the 3rd year roll out in year 2017.

Results: The educational module has been prepared with reference to online resources and a handbook developed with the help of Notre Dame University in WA. The pilot will be conducted in the next few months and initial results will be presented at the meeting.

Conclusions: It is hoped that specifically designing an educational package about clinical audit to be supervised in general practice is an effective learning medium for medical students and will also improves the uptake as well understanding of clinical audit among GP supervisors.
Ineffective study habits are common among professional students and are potential cause of poor performance. One of the important factors is how they have learned and what they have retained in their memory. The learning of study habits of the students will help a lot in improving strategies and student counselling. Many studies revealed the importance and impacts of study habits, on academic achievements. Very few researches in Saudi Arabia have ventured into the area of undergraduate medical education and have evaluated the study habits of students. This study explored students’ interest about different study habits and learning modalities preferences, and analyzed the effect of which on the performance and outcome. Aims: 1. To determine the preferences of medical and health science students about various study habits. 2. To evaluate the relationship of study habits and academic performance. A descriptive, questionnaire based cross-sectional survey were distributed among all students in college of medicine and health science of KSAU-HS (Jeddah) in academic year of 2014-2015. A 150 undergraduate, medical and health science male students randomly selected. Data were collected by using the validated questionnaire consisted of two parts of demographic questions and 67 specific areas of study habits in seven domains. The total completed questionnaires were 121 (80%). All were male students, their age ranged from 18 to 23 years with a mean age of 20.2 ±1.73. Cronbach’s Alpha reliability test was 0.90. The Average GPA of students was 4.62 ± 0.39. The major mean scores of students for different components of study habits were: meta-cognition out of five, 4 + 0.7 (median 3.9) and concentration 4 + 0.6 (median 3.75). The least mean scores of students for different components of study habits were: information discrimination 3 + 0.6 (median 3.0) and time management 3 + 0.6 (median 3.2). Only “information discrimination” (P = <0.01, r= 0.311) and “motivation” (P = <0.05, r= 0.201) and to lesser extent “metacognition” were associated significantly with GPA. Our results also showed that only time management (P <0.04) was significantly correlated with rising age. Positive study habits will surely improve the academic achievement of medical students. Motivational classes such as PBL and group studies may help students to improve their skills of study and achieving high scores. It is important to provide education and counseling promoting effective tools for study habits and skills. Designing workshop special courses in one package on entrance to the university can help the students in better learning during their educational period.

Title: Efficacy of Gagne’s Nine Events of Instructions in Improving the Performance of Undergraduate Final Year Medical Students

Presenter: Saima Ali
Authors: Saima Ali, Liaquat Ali
Institute: Peshawar Medical College, Peshawar, Pakistan
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Abstract:
Medical Education is an important part of health education system and its importance cannot be undermined in medical curriculum. The continuous expansion of medical schools and incorporation of integrated modules have opened new windows in evolving new teaching methods to improve current teaching Practices.

One of the pillars of Bloom’s Taxonomy is Knowledge and there are several methods of Mode of information transfer (MIT). One of the methods in existing MITs is a formal lecture. Although the efficacy of formal lecture in improving learning outcome of medical students is questionable, yet it is most commonly practiced across the globe.

Study Design: Prospective Cohort study
Settings: Department of Pediatric, Peshawar Medical College
Sample Size: Total numbers of 100 students
Sampling Technique: Non-Probability consecutive sampling

Inclusion Criteria: We included the final year MBBS students of pediatrics irrespective of gender who attended both of the lectures. Total number of 100 students participated in study comprising of 44 male and 56 female students. The mean Non-Gagne’s marks were 25.7(9-57). The mean marks of Non-Gagne’s in male students were 26.73 ± 14.1 SD while the mean Non-Gange’s marks in female students were 25.05 ± 11.9 SD. The Independent sample T-Test showed no significant difference (p=0.523) between male and female students in Non-Gagne’s assessment. However, the total mean score of post-Gagne’s was found to be 74.39 ± 24.9 (14-100). Female students performed better in post-Gagne’s assessment with mean of 80.61 ± 19.4 SD while mean marks of post-Gagne’s assessment in male students was 66.48 ± 28.8 SD. Paired Sample T-Test showed a significant difference (p=0.001) between total
mean of Non and Post-Gagne’s marks. Regarding the gender, Paired sample T-test revealed significant difference in favor of female students (p<0.001). Our conclusion is that Gagne’s nine events of instructions is an effective tool in improvement of performance in undergraduate medical students in Pediatrics.

Title: Residents Perspective about the Utility of Newly Introduced E-log System

Presenter: Khalid Masood Gondal
Authors: Khalid Masood Gondal, Uzma Tahir, Ahmad Uzair Qureshi, Umair Ahmad Khan
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Abstract:

Study Design: Sequential mixed method design using survey questionnaire and in-depth interviews.

Duration of Study: The study constituted an online survey followed by in-depth interviews conducted during March to March 2015 at CPSP, Regional Center Lahore.

Methodology: Data was collected from registered trainees through a web-based survey questionnaire on a scale of 1 to 7 about utility of E-log system. In-depth interviews were conducted with seven students using non-probability purposive sampling. The interviews were tape recorded and subsequently transcribed. Quantitative data was analyzed using SPSS version 20 and qualitative data was analyzed using content analysis by identifying themes and patterns.

Results: A total of 5318 residents filled the questionnaire about E-log System. Mean score of question one (E-log system has motivated them for timely completion of their training-related tasks) was 4.59 + 1.99. When asked about whether E-log system gives them control on their learning, the mean score was found to be 4.34 + 1.99. E-log System is easy to use got a mean score of 4.55 + 2.15. Internet facility is easy to access at their workplace got 4.34 + 2.20 and E-log is a useful exercise for learning 4.34 + 2.03. A mean score of 4.85 + 2.08 was observed in response to question about the role of supervisors feedback in their learning. Organization, motivation, personal development, frequent interaction with the supervisor, revision of important concepts were identified as subthemes during in-depth interviews. Further improvements like inclusion of international books and weekly educational activities were suggested.

Conclusion: The overall acceptance of the students regarding E-Log system was high. Scheduling IT workshop at start of training will add to the student satisfaction regarding utility of E-Log system.

Key Words: E-log, Medical Education, Training.

Title: Living the Values - Bulletin or Imperative?

Presenter: Stefan Kutzsche
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Abstract:

Background: Practising professionalism in health care is based on human values. Student social responsibility for their actions is a commitment contributing towards social, cultural and ecological causes. However, knowing the values, but not living them might adversely affect service users.

Aim: To present the official Malaysian General Study program (MPU4) for health care professions at IMU and to assess student’s social responsibility and behaviour.

Objectives: Commitment to quality, respect, involvement, well-being, and teamwork.

Methods: MPU4 implementation to the next cohort of all students at IMU. Instruction: E-lecture, multiple case-based learning scenarios and experiential learning. Content: core values, ethics and professionalism, human rights, culture, beliefs and tradition, environment, food insecurity, poverty and health. MPU4 includes a 40 hours facilitated community service posting coordinated by IMU Cares. Assessment: reflective writing and written reports. Expected results: Prevention of negative behaviour that can have a direct impact on patient experience, clarifying people’s needs and expectations and strive to ensure they are met, producing and sharing understandable information, ensuring vulnerable clients are kept safe, acting on feedback from service users about their experiences, improving standards through experience and evidence based practice, learning from mistakes and building upon successes.

Conclusion: MPU4 may increase students’ confidence to meet life’s challenges, and improve outcomes and experiences for clients, students and staff.
Title: Impact of Students' Feedback on Improving the Teaching Practices of the Faculty

Presenter: Syeda Asiyah Bukhari
Authors: Syeda Asiyah Bukhari, Usman Mahboob, Sahir Atique, Jamil Ahmed
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Abstract:
Teacher evaluation has become an essential part of accountability in higher education. One of the most commonly used methods to evaluate teachers' performance is through students' feedback. We did a longitudinal study at Khyber Medical University to analyze the students' feedback on teachers' performance and to determine the impact of this evaluation.

Objective: To determine the correlation and significance of students' feedback on improving teachers' performance.

Methodology: The students' feedback on teachers' performance was analyzed for 38 faculty members from 2011 to 2014 including feedbacks from four semesters. The means and standard deviations were used to determine the trend in the overall performance of the teachers. The one-sample t-test was used to determine the significance of these trends in the teachers' performance. The analysis showed downward trend in the teachers' performance in the last year from 89.9±5.0 to 86.6±6.1, however it is still above the benchmark of 70 percent, set by the Quality Enhancement Cell of the University. The students' feedback also shows a significant (p<0.00) downward trend in teachers' performance in the successive semesters at 95% confidence interval. The students' feedback also shows a significant (p<0.00) downward trend in teachers' performance from each Institute of the University at 95% confidence interval. The University needs to take an action such as starting a faculty development programme due to an overall significant downward trend in the teachers' performance. Further qualitative studies are required to identify the reasons for the decline in teachers' performance.

Title: Efficacy of Directly Observed Procedural Skills (DOPS) in Assessment

Presenter: Liaquat Ali
Authors: Liaquat Ali, Saima Ali, Nasir Orakzai
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Abstract:

Objective: To determine the effectiveness of DOPS in assessment and improving operative skills of postgraduate residents in Urology.

Methods: It is a pilot multi-phase comparative study, conducted in department of Urology at Institute of Kidney Diseases Peshawar from June till December 2014. We initially developed a longitudinal checklist for the skills of postgraduate residents in urology. It included Cystourethroscopy & DJ stent, transurethral resection of prostate TURP and Ureteroscopy (URS) and Intracorporeal lithotripsy. Then in first phase total of 20 post graduate residents with comparable EQ of different levels were assessed with structured proforma specially designed for DOPS with scores from 1 to 5.

1. Insufficient evidence
2. Below expectation for completion
3. Borderline for completion
4. Meets expectation
5. Above expectation

The results of initial DOPS their strength and weaknesses were shared with residents individually. During second phase, intervention was made and all the three procedures were performed by 4 consultants under standardized checklist respectively. The residents observed all the procedures with standard protocols. During third phase, a repeat assessment of 3 residents was performed to study the overall improvement in operative skills respectively. Data was analyzed on SPSS version 17 and was analyzed on SPSS.

Result: Total number of 20 residents of urology participated in the study. 6 residents were in 1st year, 6 residents were in their 2nd year and 8 residents were in their final year of training. The mean score of overall ability to perform procedure...
The Relationship between Bilingualism and Academic Achievement in Students of Mazandaran University of Medical Sciences

Presenter: Fatemeh Ahmadinia
Authors: Fatemeh Ahmadinia, Abolhasan, Naghibi, Akbar, Mohammadi
Institute: Tehran University of Medical Science, Tehran, Iran
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Abstract:
Background and Aims: First Language obtained during normal development and requires no formal training but acquiring these skills in a second language requires training and infrastructure and the memory is read. The aim of this study was to investigate the relationship between bilingualism and academic achievement in students of Mazandaran University of Medical Sciences.

Methods: This study was a descriptive - cross sectional study. Subjects included 706 students (318 boys and 388 girls), Mazandaran University of Medical Sciences were selected through random sampling. Data for the study were the use of the checklist.

Results: Between school and academic achievement, there was a statistically significant relationship (p = 0.001). Dental students had the highest academic achievement. Medical students were the least progress. Mazandaran dialect was the greatest achievement of the students and Kurdish students were the least progress. But did not reach any level of significance (p= 0.33).

Conclusions: If part of the educational program in schools and universities is dedicated to learning the various aspects of first language and given the importance to strengthen and improve language skills, transfer of skills will be positive.

Title: Pharmacy Lecturers’ Teaching Methods in International Campus of one of University of Medical Sciences in Tehran, Year 2013-2014

Presenter: Simin Taavoni
Authors: Simin Taavoni, Mandana Shirazi, Marzieh Joghataee
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Abstract:
To determine Pharmacy lecturers’ teaching methods in International Campus of one of University of Medical Sciences in Tehran, Year 2013-2014

Materials and Methods: In this descriptive study, entire of faculty members and lectures of pharmacy school of International Campus in one of University of Medical Sciences in Tehran (70 person) had been involved voluntary. (Year 2013-2014) The valid and reliable tool of study had two main parts of Personal Characteristics and teaching methods. Descriptive statistics were used. All ethical points were considered in this study.

Results: In this study just 5.7% of participants teaching method were only lecture, and others used mixed teaching methods. Mixed of two teaching methods were 14.3%, three methods were 27.1%, four methods were 22.9%, five methods were 8.6%, six methods were 10%, seven methods were 1.4%, eight methods were 5.7%. Lowest mixed teaching method were 9, 10 and 11 (each one 1.15%) and lowest method, which had been used, was role playing with 8.5%.

Conclusion: Based on the findings of this study and considering decrease of student marks during the years of their studies, it is suggested that to...
check whether student's Learning style was match with teaching methods, also by using qualitative study find the reason of this problem.

**Title:** Peer tutoring; Medical Students and Faculty Opinion

**Presenter:** Amena Rahim  
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**Abstract:**

Peer teachers are widely used in medical education and there is growing evidence from different studies conducted that peer tutoring benefits both the medical students and the faculty. No studies conducted so far have shown any disadvantage related to this teaching methodology. It has been adopted by many medical institutions world over but in our country we are still in the experimental phase of its introduction. The Purpose of the study was to get the insight of both the students and faculty of Islamic International Medical College regarding peer tutoring as the attitude of both the students and the faculty members will impact the introduction of Peer tutoring in our system.

Study was conducted on 400 medical students i.e. First and Second Year and fourth and Final year students plus 100 faculty members of Islamic International medical college, Rawalpindi. Data was collected by means of structured questionnaires designed both for the students and the faculty separately. Questionnaire was distributed among the faculty and the students. Only the year of the students was taken into consideration. Both preclinical and clinical faculty was involved.

Analysis of the data was done by means of SPSS 21. Frequencies and percentages were calculated. About 83% Preclinical students preferred peer tutoring to junior faculty tutoring in self-study time in comparison to 60% of the clinical students. For preclinical 92% agreed that it is the duty of the academic faculty to help in students learning as compared to 88% of the clinical students. 93% of preclinical students and 80% of clinical agreed to free time tutoring. 90% of both the groups agreed that it would create a positive culture and 90% of the faculty also agreed to it. 44 to 45% think that the peers can give misinformation and can abuse their role but only 34 to 30% agreed for the clinical students and 35% of the faculty had the same opinion. For stigmatizing of the weak students both had almost the same percentage of almost 50 to 58%. The faculty was not very optimistic about decreasing workload 20%, new experience 25%, better feedback 20% and being guilty about the whole process 20%.

It is concluded from this study that peer tutoring is perceived as a favorable learning methodology both by the medical students and the faculty and it can be utilized as a valuable teaching tool in the preclinical and clinical settings.

**Title:** Impact of Left Handedness on Surgical Practice

**Presenter:** Ateeba Ayesha Khan  
**Authors:** Ateeba Ayesha Khan, Talha Ahmed  
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**Abstract:**

**Background and Aims:** In the world of right-handed dominancy, left-handedness has been considered a social stigma or an inconvenient hassle. A left handed is expected to change its laterality from the beginning. While children in schools are subjected to forceful trial of right hand for writing, left-handed adults are expected to adapt to laterality change by the use of right-handed instruments and working environment in general. This silent adoption is entrusted on left handed medical & allied personnel also as mentoring, practical procedures and availability of surgical instruments continue to be of right-handed bias. In this study we surveyed the perception of left-handed surgeons on how laterality bias affects their dexterity and skills.

**Methods:** The study was conducted in various teaching hospitals of Karachi, Pakistan. The departments covered included General Surgery, Gynaecology & Obstetrics, Ophthalmology, ENT, Neurosurgery, Vascular Surgery, Urology, Cardiothoracic Surgery, Plastic Surgery, Orthopaedic Surgery and Dentistry. A questionnaire was filled by left-handed or dominantly left-handed ambidextrous surgeons. Right-handed surgeons were excluded. A total of 24 participants were included in the study. All the participants filled out the questionnaire completely. The questions were about the laterality of the participants and how it affected their practice in terms of examining the patient and performing procedures. The survey also covered lateral predominance based mentoring and training support and workplace bias faced due to their handedness.
Results: All volunteer participants filled out the questionnaire 100% completely and returned it. Out of 24 participants, 15 belonged to General Surgery, 3 were trainee in Orthopaedic Surgery, 2 belonged to Dentistry and 1 each were of ENT, Ophthalmology, Urology and Gynaecology & Obstetrics. Among 24 participants, 19 were postgraduate trainees, 3 were of Associate Professor level and 1 was Head of his Department. Apart from 1 participant, all the others mentioned that they were not provided with left-handed surgical instruments. Although 74% expressed that use of left-handed instruments would significantly improve their surgical skills, yet 64% consider that right-handed instruments were not difficult to use. A vehemently 83% felt their handedness slowed down their surgical speed and accuracy compared to right-handed colleagues. Regarding laterality training, only 1 participants mentioned being mentored according to her left-handedness. 1 trainee of Ophthalmology revealed being anxious about his handedness affecting his professional dexterity and had considered changing his career choice due to it. 19 out of 24 participants switched to right-hand dominancy for examining the patient. 1 participant had referred a patient to his right-handed colleague solely it was difficult of him to perform the surgery due to his left handedness.

Conclusions: A significant gap exist in training of surgical practice to left handedness. These surgeons eventually adapt to right-handed bias by becoming ambidextrous in instrument use and surgical techniques.

Title: Occupational Learning Motivation of Students in the Vocational School of Health Services

Presenter: Albena Gayef
Authors: Albena Gayef, Birkan Tapan, Can Oner, Berrin Telatar
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Abstract: An important part of sources and problems affect the willingness for developing effective learning and continuous self-improvement of students can be explained by motivation. The study aimed to identify occupational learning motivation sources and problems in students of Vocational School of Health Services and effective factors on occupational learning motivation.

The study was carried out among 310 students attending to Vocational School of Health Services throughout 2014-2015 academic year. The data were collected by a sociodemographic questionnaire prepared by the researchers and the “Occupational Learning Motivation Scale”. The scale consists of three sub dimensions (intrinsic motivation, extrinsic motivation, negative motivation). Frequency, percentage, arithmetic mean, independent samples t-test and One-Way ANOVA test were used for evaluation of data. Significance was accepted as p<0.05. Women’s negative motivation scores were significantly higher than men. The students who chose the profession with their own request had significantly higher intrinsic motivation scores. Students who chose the profession with the request of their family had significantly lower negative motivation scores. Students who study lesson regularly, who take notes during the lessons had higher intrinsic and negative motivation scores. Students who worked in a job had significantly lower intrinsic motivation scores. Better definition of the profession, the lack of unemployment after graduation, improving the training and learning environment may decrease motivational learning problems.

Title: Metacognitive Learning Strategies of the School of Health Students and Effecting Factors

Presenter: Albena Gayef
Authors: Berrin Telatar, Albena Gayef, Can Oner, Birkan Tapan, Şahin Yesildag, Hulya Gurbuz
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Abstract: Metacognitive learning strategies are learner’s knowledge about his/her own learning, cognitive system and structure. The aim of this study was to evaluate Metacognitive Learning Strategies of students in Health School and effective factors on it. The research was conducted with 202 students attending to School of Health throughout 2014-2015 academic year. The data were collected by a sociodemographic questionnaire and the “Metacognitive Learning Strategies Scale”. Metacognitive Learning Strategies were evaluated with four subdimensions (planning, organization, controlling, and evaluation). Frequency, percentage, mean, independent samples t-test, One-Way ANOVA test were used for evaluation of data. Significance was accepted as p<0.05. Students who study lesson regularly have higher planning and organization scores. Students who use internet during studying lesson have higher...
Abstract:

Medical students usually face high pressure due to academic demands and competition. The prevalence of sleep and daytime habits among male medical students and their correlation with self-reported sleep quality and academic performance were assessed. This is a cross-sectional study using self-administered questionnaire-based on Sleep and Daytime Habits (QS&DH). Self-perceived sleep quality was reported as excellent by 61% during no exams and by 26% during examination periods. The most prevalent sleep habits were going to bed late at night (98%) & early awakening in the morning (70%), followed by drinking coffee late at night (53.6%). Taking sleeping pills prevalence was 29%. The most two prevalent sleep problems were difficulty in getting to sleep and wake up because of noise reaching (78%) & (74%) respectively. Noticeable, but non-significant correlations between leisure activity and both academic progress & sleep quality (R=0.190; P=0.088) and between living conditions and academic progress (R=0.25; P=0.065). Self-reported academic progress correlates significantly only with time going to bed and sleep quality (R=0.296; P= 0.007 & R= -0.236; P=0.033 respectively). Sleep affects academic progress to a large extent. Sleep problems are prevalent in students. Proper counseling, better planning and support should be provided to students likely to suffer from them.

Title: A Snapshot of Clinical Anaesthetics Training in UK Medical Schools

Presenter: Syed Taha
Authors: Sanjeev Ramachandran, Syed Taha, Harish Venkatesh
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Abstract:

Clinical anaesthetics rotations during medical school offer several benefits to medical students. It is therefore important to monitor the provision of anaesthetics training to ensure that standards are consistent at a national level. We performed a preliminary cross-sectional evaluation of clinical anaesthetics training in fifteen medical schools throughout the United Kingdom. We adopted a mixed methods approach using a standardised questionnaire and semi-structured interviews of clinical medical students. Data were collected from 65 medical students, with a response rate of 86.7%. Two out of the fifteen medical schools (13%) did not provide compulsory anaesthetics training, and only offered rotations as part of student selected modules. Within the remaining thirteen institutions, there was significant variation in the length of rotations (median: 2 weeks, range: 2 days-6 weeks). Ten institutions (67%) consistently provided students with learning objectives, which ranged from knowledge of airway equipment to anaesthetic pharmacology. Only two institutions (13%) have introduced supervised assessments of clinical and procedural skills. Students at three medical schools (20%) cited specific concerns regarding the variation in experiences between hospital sites. Based on our preliminary results, we recommend that: 1) A minimum length for clinical rotations is established to ensure adequate exposure; 2) Assessment of procedural and clinical skills is formalised to facilitate student learning; and 3) Institutions aim to minimise variation in experiences across hospital sites.
Title: ‘Rationalizing Academic Advising’- Removing Redundancies to Foster Pedagogical Resilience

Presenter: Noreen Zahid Mirza
Author: Noreen Zahid Mirza
Institute: College of Medicine, Princess Norah bint Abdul Rahman Women University, Riyadh, Saudi Arabia
Email: nzmirza@gmail.com

Abstract:
Entering a medical college is a major transition for most students. Having just the high school experience, it's difficult for them to manage the information influx & are awed by the increasingly complex concepts especially in an integrated curriculum. Quality teaching takes skill, time & effort yet many concepts remain unclear.
Besides academics, students need a scaffolding environment which can guide, supervise and mentor when needed. For the above and a myriad of reasons the students are in a dire need of holistic Academic Advising. Academic Advising according to the ‘National Academic Advising Association’ “synthesizes and contextualizes students’ educational experiences within the frameworks of their aspirations, abilities and lives to extend learning beyond campus boundaries and timeframes.”

In conclusion, the AAU not only served as the academic advisor, but also cemented and bound the integrated curriculum, screened out redundancies making the curriculum more pedagogically resilient.

Title: Undergraduate Foreign Medical Students’ Adaptation to College: Solution of Problems From the Individual to the Institution

Presenter: Nilufer Demiral Yilmaz

Title: Medical Education System in North Korea

Presenter: Seok Hoon Kang
Authors: Seok Hoon Kang, JeongHee Yang, Ja Kyung Kim
Institute: Kangwon National University School of Medicine, South Korea
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Abstract:
Background and Aims: North Korea (NK) is one of the most closed societies in the world. NK didn’t show their medical education system, the difference of medical education contents or levels
of medical sciences between South and North Korea could be a barrier of cooperation between doctors after the union of Korean peninsula. **Methods:** We reviewed a few previous papers about North Korea Education system and made focus group interviews with several doctors who escaped from North Korea. **Results:** Including military medical school, there are 11 medical schools in North Korea now. They have regular 6.5 years curriculums for undergraduate medical education but permit the other curriculums in their school such as night class or correspondence course for fostering pseudo doctors. Pseudo doctor producing medical education system adopted only 3~5 years curriculums. Insipite of distinctions of educational levels and periods between regular course and the others, every graduate is called ‘doctor’ equally. Although the number and the type of school subjects of NK’s regular medical schools are similar to those of South Korea’s. But laboratory medicine, diagnostic radiology, preventive medicine, pharmacology favored with genetic technology, and highly difficult surgeries including cardiac or laparoscopic surgery are hardly to be taught or trained by medical school or teaching hospital in NK now. **Conclusions:** Consequently, as there is a deep and sharp gap in medical education between North Korea and South Korea, it is expected severe chaos coming after the union of Korean Peninsula.

**Title:** Collaborative Inquiry-Based Laboratory Activity Enhances Student Engagement and Learning

**Presenter:** Ciraj Ali Mohammed  
**Author:** Ciraj Ali Mohammed  
**Institute:** Melaka Manipal Medical College, Manipal, India  
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**Abstract:** Basic concepts and practice of clinical microbiology often appear disconnected in the laboratory exercises of medical microbiology curricula. This intervention was designed to incorporate collaborative inquiry based laboratory activities that integrate fundamentals of clinical microbiology relevant to the practice of medicine. During the lab activity, student groups in rotation visited 8 stations for a predetermined time. Each station had a patient case that provided relevant history and laboratory results necessary for the identification of the microbe in question. The vignettes also carried queries on pathogenesis and laboratory diagnosis along with management and preventive strategies, incorporated in a way to foster team work and elicit group discussions. Learning outcomes linked to skills and knowledge in the aforementioned areas was assessed using pre- and post- quizzes, laboratory reports, and surveys. Analysis of the survey results indicate that students showed significant preference (8.6 out of 9) to use this collaborative strategy. They also opined that the method enhanced student engagement (8.3 out of 9) and helpful them clarify concepts better (8.2 out of 9). The average grade (75.8%) on the post-quiz was significantly higher than the average (47.5%) on the pre-quiz (student t-test p<0.001). It was also found that students improved their mastery of each outcome when questions were mapped to the learning outcomes. Collaborative inquiry-based laboratory activities enhance student engagement and learning.

**Title: Use of Smart Devices Medical Applications among Medical Students**

**Presenter:** Mukhtiar Baig  
**Authors:** Mukhtiar Baig, Zaid Sayedalamin, Osama Mohammad Almouteri, Hassan Saleh Allam  
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**Abstract:** Medical applications (apps) are increasingly becoming popular among health care personals. Easy availability and utilization make them popular among the general public as well in clinicians. The present study was aimed to investigate Medical Student’s perceptions and use of smart phone medical applications. This survey was conducted at the faculty of Medicine, Jeddah and Rabigh, King Abdulaziz University (KAU), Jeddah, Saudi Arabia. The opinion of the medical students was taken about their use and impact of Medical Apps and the name of App being used most frequently by the students. Data was analyzed on SPSS 21. The response rate was 72% and opinion of 310 medical students from all academic years was included in the study. There were 170 (51.5%) males and 160(48.5%) females and mean age was 21.26±1.86 years. Almost all students (97%) of the participants were well aware of medical apps for smart devices and 89.1% had installed different medical apps on their smart devices. Main usage was for either revision of courses (62.4%) or for looking up of medical information (67.3%) followed by for preparing a
Title: Association of Perceived Stress level (PSS), Quality of life and Coping Strategies in Physical therapy students of Rawalpindi/Islamabad Pakistan.

Presenter: Furqan Siddiqi
Authors: Furqan Ahmed Siddiqi, Arshad Nawaz Malik, Raheela Yasmee, Muhammad Ehab
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Abstract:

Background: Stresses involved in undergraduate training of Physical Therapy Students may affect their intellectual performance, learning as well as their attitudes towards life satisfaction. This major issue has been highlighted by many researchers in recent years but such studies are lacking in Physical therapy colleges of Pakistan.

Purpose of Study: The main objective of this study was to find out the association of stress level, quality of life and coping strategies of undergraduate physical therapy students.

Methodology: A cross sectional study was conducted and a sample of 300 from First Year (first and second semester) physical therapy students was taken through systemic probability sampling during the time period February 2015 to April 2015. Self-reported questionnaire consisting of Satisfaction with Life scale (SWLS), Perceived stress Scale (PSS) COPE inventory as well as demographic section were distributed to students at four Physical Therapy Institute in Rawalpindi/Islamabad Pakistan.

Results: Out of 300 students 250 (83.3) were females and 50 (16.6) were males. Life satisfaction was significantly different in gender (p=.001). Academic and psycho social distress was included among the most frequent stress source. Other sources includes heavy load of studies, Test/exams, high parental hopes, enormity of curriculum, lack of time for amusement. The main coping strategies actively used by students in different institutes were, acceptance, planning, self-distraction, positive re framing and emotional support.

Conclusion: It is concluded that stress and coping strategies played a big role in life satisfaction and hence responsible for good quality of life. University authorities should adapt evidence based interventional approaches to reduce perceived stress and to promote stress management and coping strategies so that the attitudes towards life satisfaction can also be improved.

Title: The Importance of Nursing Informatics Education as Specialty

Presenter: Asieh Darvish
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Abstract:

Background and Aims: Information technology plays high role in nursing practice as a profession. This study emphasizes the importance of nursing informatics education as a specialty to facilitate technology effective application in health care.

Methods: Review study has formed with extensive literature search in databases and articles with focus on emerging technologies and nursing care.

Results: As a result it is necessary to empower nurses in different target groups, in order to effectively take advantage of IT in nursing outcome and quality of health care.

Conclusions: So it is recommended to provide nursing informatics certificates and Master and Doctoral graduate programs and degrees and related curriculum developments.

Title: “Just Google it...” - The Internet and its Effect on Medical Knowledge

Presenter: Javin Singh Sandhu
Authors: Javin Singh Sandhu, Drew Tarmey, Lucie Bryne Davis, Colin Lumsden
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Abstract:

Background and Aims: The internet has a significant impact on our lives. In terms of medical knowledge, the internet has allowed it to be instantly available and easily accessible. We aimed to investigate the thought processes of clinical medical students when being questioned about their knowledge.
Methods: 20 clinical medical students based at the University of Manchester were asked to perform a modified stroop task (in which target words were placed in different colours) after answering a set of easy or difficult questions. Their reaction times to computer target, medical target and unrelated words were measured to analyse the extent to which these words were in their thoughts. A longer reaction time indicates that the word is more accessible to the participant thereby interfering with the fastest possible colour naming.

Results: Participants had a longer reaction time to the computer terms than the unrelated words after being asked the easy questions ($t(19) = -3.196, p=0.005$) and the hard questions ($t(19) = -4.953, p<0.001$). Traditional medical data source words were also compared to modern computer data source words. After the post-hard stroop, the distributions of the reaction times were nearly identical ($t(19) = 0.051, p=0.960$).

Conclusions: Clinical medical students were primed to think about computers when questioned about their knowledge especially when posed with a gap in their knowledge. In order to fill this knowledge gap, students thought about both traditional medical and modern computer data sources to the same extent.

Title: Impact of a Social Network Group Page on Undergraduate Medical Student Learning

Presenter: Tania Ahmed Shakoori
Authors: Tania Ahmed Shakoori, Usman Mahboob, Janet Strivens
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Abstract:

Students in all health professions accept social media tools for learning. The most popular among these networks is Face book. We investigated the impact, if any, of associating classroom learning with a face book group page in an all-women medical college of a conservative small city in Pakistan. A closed face book study group (‘Physiology WMC’) was established in Women Medical College, Abbottabad. It was used to upload learning resources and initiate discussion between the students. Semi structured interviews were conducted according to standard protocol. Audio recordings of the interview were transcribed by the interviewer for accuracy. Guiding questions were developed after conducting three preliminary pilot interviews. Data analysis was done concurrently with data collection A total of 13 interviews were conducted. The following major themes were identified:

1- Page is something new and exciting
2- Convenient to download uploaded resources including lecture presentations from Face book
3- No pressure to write down notes and can concentrate on what is being discussed in class
4- Easier to communicate (with teacher) through Face book than face to face
5- Uploaded materials made students study before coming to class
6- Uploaded cases stimulated students to research answers on the net
7- Motivated to attend lectures
8- Helped facilitate peer learning and develop study groups
9- Those not interacting directly are also learning.
10- Page has taken learning from restriction of the classroom into their lives
11- Kept informed about academic activities

The study demonstrates that using social media for e-learning in undergraduate medical education can enhance student learning experience.

Title: Medical Subjects Online Interactive Review for Undergraduate Medical Students in Remote Locations in India on Streaming Live Interactive Online Video Class over Mobile Phone

Presenter: Murali Mohan Yadavalli
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Abstract:

Starting with 23 medical colleges at the time of Independence of India in 1947, we have reached a total of 398 colleges in 2015, with a total capacity of approximately 52305 medical students admitted every year.1 If all the medical students of 5 years in undergraduate medical school are considered, it equals nearly 2, 00, 000 medical students across country. All the medical students across world have nearly similar medical curriculum but only differently proportioned across medical school years. It is well known that there is a 30%–40% shortage of medical teachers across India 2. Even among the medical teachers appointed in India, their passion to teach varies. Even among passionate medical teachers, their opportunity to teach in academic schedule allotted in the department is not 100%. There are many passionate medical teachers in private clinical practice who have not joined medical college as faculty. There is a need for informal academic
platform that can bridge medical students in the want of good medical teacher and medical teachers in the want of a podium for knowledge and skill transfer. The challenge of this pursuit is that good teachers are geographically separated widely from medical students. We have done nationwide talent hunting for passionate medical teachers and enlisted 143 medical teachers Pan India. We have built a Course Mangement platform on Content Distribution Network (CDN ) Servers with the domain www.anatomy2medicine.com (A2M). The A2M uses the Live streaming services of Livestream.com and Desktop broadcasting app Procaster. Medical students login to the session from desktop, laptop or Mobile smart phone. The broadcast has scalability to work at low bandwidth of 256 KBPS to 1 MBPS. Also the broadcast has scalability to accommodate 10000 concurrent users. Teachers have live students sitting before them. Also there is a laptop before them where they have visibility of chat window into which online students punch their doubts, responses to quiz questions by teacher. If the teacher prefers to use white board, he can switch from 3D View to camera mode where entire white board of teacher is projected and PowerPoint is minimized. When session is over, it is automatically archived into both the server and local desktop from where it is broadcasted. The captured video is processed in our digital lab and HD Version of the same is hosted on our Video hosting server of Vimeo.com and the permalink of Video is embedded into the A2M server into relevant course subject, topic category in the LMS for the students to asynchronously access the archived video to access the lecture anytime anywhere across globe. We conduct online survey to get feedback on each class and also provide classroom lecture notes as pdf on a separate application called edmodo.com

In a follow up of 30 weeks, 400 medical students Pan India across 60 locations have felt a huge acceleration in their learning process. 82 medical students are so adopted to the video lectures that they reported that whatever the time they take in reading books, in 12% of that time they could master the concepts. With conceptual clarity they have more confidence and better time available to spend with patients than wasting hours together of time in self-study in reading rooms. 70 medical students have added some more clinical video resources on YouTube to this structured learning content and enriched their learning process. 70% of medical teachers were very satisfied that their teaching could reach remotest medical students. 65% medical teachers volunteered to include their phone number into whatsapp group of medical students, so that they can mentor the attendees across country anytime for academics. Students are able to attend continuous 8 hour day long sessions also on this platform 1400 hours of Lecture Video is archived covering 2600 topics in 19 Subjects in medical school in Learning Management system of www.anatomy2medicine.com which is attended by 400 medical students Pan India across 60 locations. The lectures are used by medical students worldwide as a learning resource for preparation to medical school exams and medical licensing exams like Post graduate Medical entrance exam in India, USMLE etc. We have found that, mobile learning and e-learning platforms with synchronous Live streaming training sessions and asynchronous archived Video Library is the reality with advent of good internet connectivity. The mobile learning platform is very cost affordable, scalable and can be tailored to learning needs of medical students. With demanding clinical practice, medical teachers with huge passion to teach can still contribute a great amount of time and deliver their world class knowledge transfer to deserving medical students globally separated. The mobile learning platform A2M is a very good supplement to the traditional classroom in Medical school. A2M also increase the confidence in medical students to face clinical scenarios in wards and prepare for board exams and Licensing exams.

In future A2M plans to expand the network of medical teachers across 170 countries and include Live streaming sessions from Clinical wards and Surgical theatres and create a bigger audience to access structured learning content affordable to every medical student from impoverished countries to affluent economies.

Title: Student Perception of Educational Environment in Rehman Medical College, Peshawar, Pakistan

Presenter: Tariq Saeed Mufti 
Author: Tariq Saeed Mufti
Institute: Rehman Medical College, Peshawar, Pakistan
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Abstract: Undergraduate Medical education in Pakistan at MBBS course level is following the traditional system under the national guidelines. The educational environment adopted by Rehman...
Medical College, a newly established private sector medical institution, has tried to incrementally introduce the important aspects of the modern integrated curriculum. Although the University does not require assessment of the educational environment, it is considered an important component to promote learning. Perception of students regarding their learning environment is considered important by the policy makers in assessing the quality of their educational program. DREEM has been used as a successful tool to evaluate an educational environment. The present study aimed to evaluate perception of MBBS students of years 1-4 by using the DREEM inventory. The DREEM questionnaire was administered to all the 400 students of MBBS years 1-4. The duration of study was 08 weeks (May-June 2014). Scoring was done on the 5 point Likert scale. The final scores were categorized as Strongly Agree (5), Agree (4), Unsure (3), Disagree (2) and Strongly Disagree (1). Total Scores were calculated for the five categories of the DREEM (PoL, PoT, ASP, PoA and SSP) as well as Overall Score. Comparisons were done for all categories from year 1 to 4 and tested for significant changes and trends. Comparative assessment of groups was done by Chi-Square and Student T-Tests, keeping p ≤ 0.05 as significant.

The response rate was 67.5% (total 270 students). Trends for year 1 to 4 for PoL showed mean scores of 26.03 ± 7.03 and 36.54 ± 6.60 (p<0.001); for PoT these were 31.74 ± 5.50 and 32.14 ± 5.06 (p=0.641); for ASP these were 29.92 ± 6.17 and 26.85 ± 5.16 (p=0.001); PoA these were 37.71 ± 7.20 and 35.55 ± 6.88 (p=0.057); for SSP these were 22.56 ± 4.80 and 22.66 ± 3.72 (p=0.888); and for overall scores these were 148.0 ± 14.50 and 153.74 ± 19.87 (p=0.041). These results indicate a significant trend of satisfaction with increasing MBBS years in PoL; ASP showed a significant decreasing trend while PoA showed a near significant decreasing trend. Non-significant trends were obtained for PoT and SSP.

The educational program at Rehman Medical College, though in its infancy, achieved an overall significant satisfactory rating from students who interacted with it from one to four years of the MBBS course. Satisfaction was most evident for the Learning environment; this is in contrast with another large study conducted in a public sector medical institution of Pakistan with a similar educational program. Satisfaction with teachers, student support and the college atmosphere remained steady. Significant drop in academic self-perception may be linked to higher goals of achievement related to increasing complexity of competency. Further longer term studies with larger samples may be required to establish these findings on a firm footing and to incorporate further improvement in the educational environment by the program planners.

Title: Impact of Social Media on Attitudes and Professional Growth of Physical Therapy Students of Foundation University

Presenter: Naureen Tassadaq
Authors: Naureen Tassadaq, Sana Bashir, Muhammad Ehab Azeem
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Abstract:

Background: Social media has created a revolution in the field of health sciences. Information available on the Internet and via social media is now being used as reference guides for almost all health issues by not only nonprofessionals, physicians but medical students as well. When used by physicians and medical students, social media has the potential to raise issues such as the blurring of the line between professional and private lives, patient relations, and medical ethics. The aim of this cross-sectional study was to evaluate the use of social media on attitudes and professional growth among Physical Therapy students.

Methods: A self-structured questionnaire is designed to survey the physical therapy students of Foundation University. This self-structured was based on two sections, the first containing questions assessing the frequency of social media use & its usefulness on student's professional growth and the second regarding attitudes towards the use of social media in physical therapy.

Results: Survey responses indicated that 60% of physical therapy students use social media for professional purposes which are really productive for their professional growth. Factor analysis showed that attitudes toward social media are based on five factors: professional usefulness, popularity, ethics, barriers, and innovativeness. A structural equation model revealed the highest positive correlation between usefulness and innovativeness; ethics had a low but positive correlation with other factors.

Conclusion: Social media is being used extensively by physical therapy students; they use it very frequently but out of them most use it for the sake of entertainment. Particularly when they use...
Title: Assessment of Lecture and Bed Side Teaching Compared to Self-Learning (Control) in Achieving Competence in Screening for Developmental Dysplasia of HIP

Presenter: Abdul Kareem Bhurhanudeen
Authors: Abdul Kareem Bhurhanudeen, Davendralingam Sinniah
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Abstract:

Background and Aims: Routine clinical examination of newborns including screening for developmental dysplasia of hips (DDH) by performing Barlow and Ortolani tests.

Objectives: To determine which of three learning methods for DDH screening is better.
1. Self-learning (Control)
2. Lecture using video clips
3. Bedside teaching and demonstrating on newborn baby

Methods: IMU semester 8 medical students were randomised into three subgroups to receive three types of learning exposure as above. After one hour all volunteer students underwent an OSCE for 5 minutes on Laerdal Baby Hippy (LBH) on which they did not have any previous exposure.

Results: The results achieved by three groups were analysed using analysis of variance statistical significance was set at 0.05. The three groups 1-3 had 17, 18 and 18 students respectively. There mean (standard deviation) and median range of OSCE score were follow: Group1 mean = 8.2(2.7), median = 7.0(6-14) Group2 mean = 9.1(2-8), median = 8.0(5-14) Group3 mean = 9.0(2.7), median = 8(6-15). Comparison of OSCE score of three group and between did not show any statically significance.

Conclusions: All three groups learned correctly examination technique by these three learning methods but unable diagnose the condition as well unable to reduce hip in the (LBH). We feel study needs to replication of larger students samples.

Title: Rehabilitation knowledge and Competency Outcome of Thammasat Graduated Medical Students

Presenter: Pornrawee Peanpadungrat
Authors: Pornrawee Peanpadungrat

Institute: Faculty of Medicine, Thammasat University, KlongLuang, Thailand
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Abstract:

Since 2004, Faculty of medicine of Thammasat University had started to use an integrated learning method for medical students. The students had learnt by body system base in preclinical years and they had integrated minor subjects into major subjects in clinical years. Rehabilitation medicine was one of minor subjects which had not emphasized for medical students. We had only 5 hours lecture, 3 hours bedside teaching and 3 times for out-patient service observation in overall integrated course in three clinical years. This research focus on the rehabilitation Knowledge of graduated medical students of Thammasat university and the outcome of different rehabilitation teaching method in integrated learning course. The test for determine knowledge and problem solving ability was done in 57 graduated medical students in 2015 (n=57, population=59). The results show the average score of medical students was 51.70%. There was no different from the testing score of doctors who had practiced in Thammasat University Hospital and had graduated 2-9 years ago, with a p-value = 0.0909. The result of knowledge outcome using different teaching method in the integrated rehabilitation learning course had no statistically significant difference.

Title: While Adapting, What are the Coping Strategies Used by Foreign Residents?

Presenter: Nilufer Demiral Yilmaz
Authors: Nilufer Demiral Yilmaz, Hatice Sahin, Aylin Nazli
Institute: Ege University, Izmir, Turkey
Email: nilufer.demiral@gmail.com

Abstract:

Background and Aims: Physicians from various countries come to our country for specialization education. They are admitted to the institutions that they will be educated in via a centralized exam. Their adaptation and coping strategies vary depending on their personal maturity and age. The aim is to evaluate the adaptation levels and coping strategies of the residents.

Methods: The research used a mix model that incorporates both qualitative and quantitative research methods. The study group of the research was comprised of 72 foreign residents currently working in Ege University Medical Faculty. Two measurement tools were used:
Title: The Effect of Role-Playing Method on Professionalism Ethics and Privacy of Pregnant Mothers in Midwifery Students

Presenter: Hoda Ahmari
Authors: Hoda Ahmari, Maryam Yavari, Nazanin Shamaeiyan Razavi, Mahla Salajegheh, Amin Hosseini Shavoon, Reza Jafaei Dalouei
Institute: Tehran University of Medical Sciences, Tehran, Iran
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Abstract:
Introduction: Consideration to dignity and privacy of pregnant mothers is a critical issue of mother care that midwifery student must learn at onset of studying at university to apply it comprehensively. The present study aimed at determining the effectiveness of role playing method on the consideration to dignity and privacy of pregnant mothers in midwifery students in 2014.

Method: The present study is a quasi-experimental study on all midwifery students in the last semester of BS in Qom University of medical sciences. Consideration to privacy of mother was assessed by a researcher-made checklist for student performance. Descriptive and inferential statistics (paired sample t test and chi-square) were used to analysis the data with p<0/05.

Results: Mean difference of the consideration to dignity and privacy of pregnant mothers by students was statistically significant before and after intervention (p<0/05). Consideration to dignity and privacy had significant association with marital status (p<0/05) but no significant association with mean score of semesters and occupation history (p>0/05).

Conclusion: The present study indicated that training by role playing method was effective on performance of students in consideration to dignity and privacy of pregnant women so, we suggest that instructors and teachers of midwifery should pay more attention to inform midwifery students at onset of education at university about consideration to dignity and privacy of pregnant women using active training method.
the topics by mere byhearting. Reinforcement in the form of revisions, goal setting and developing deeper understanding of concepts have emerged as major determinants of students’ performance in examination in pharmacology. Hence, students should be made aware of these aspects to improve the quality of study.

**Title:** Comparing Effectiveness of Lecture and Problem-Based Learning in Nursing Students, At Jahrom University Medical Science

**Presenter:** Najafipour Sedigheh  
**Authors:** Najafipour Sedigheh, Najafipour Fatemeh, Raoofi Rahim  
**Institute:** Eucational Development Center, Tehran, Iran  
**Email:** se_najafipour@yahoo.com  
**Abstract:**  
**Background and Aims:** Education is one of the most basic necessities of communities and an important base of continuous development. New and active teaching methods may increase learning and motivation of students. This study was conducted compare effect of lecture and problem-based learning (PBL) on nursing students learning in a pediatric course at Jahrom Medical University in Iran.  
**Methods:** This quasi-experimental study was carried out on 30 nursing students who had completed a pediatric course at Jahrom Medical School. Eight sessions of lecture was run for all students. Then they were randomly divided into two groups for PBL (15 students each group), and eight PBL sessions was run for two groups at two separate times. PBL approach was based on 7 trips Mastersched models. The data collection tool was a demographic data sheet and pediatric test in the form of multiple choice questions in mid-term exam and final exam  
**Results:** There are significant differences between two teaching methods (P<0.0001). The mean grade increased in lecturing method more than PBL method but satisfied with PBL method more than lecture. There are significant differences between in student satisfaction about the two teaching methods (P<0.0001)  
**Conclusions:** As to finding, it is recommended to apply active methods in education. It may increases student’s motivation and develops learning and retention and communication skills.

**Title:** Enhancing the Competencies of Medical School Faculty through Customized, Regular, and Mandatory Round of Workshops in Homogeneous Groups

**Presenter:** Ayesha Rauf  
**Authors:** Ayesha Rauf, Ali Tayyab, Shoaib Hussain Shah  
**Institute:** Shifa College of Medicine, Islamabad, Pakistan  
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**Abstract:**  
**Background and Aims:** Shifa College of Medicine values its faculty and the role that it plays in all curricular activities. The competencies required for effective delivery of the integrated curriculum have always been the focus of attention. To date 128 interactive educational development seminars have been conducted on last Saturday of every month.  
**Methods:** In 2013-2014, six workshops were planned to develop the required skills in Leadership, Teaching, Evaluation, Research, Written Assessment and Performance Assessment. The college faculty was divided into 6 groups; three groups of junior faculty and three of seniors. Core group of 3-4 faculty members for each of these workshops, under the guidance of the Department of Health Professions Education, developed objectives, strategies and material customized to suit the level and experience of the faculty.  
**Results:** All groups rotated through the customized workshops on the six themes. Faculty feedback was collected at the end of each workshop. The faculty appreciated the workshops in smaller groups and felt that learning was enhanced. The facilitators however felt that the repetition was making them less enthusiastic about facilitation and that they were not able to attend any workshops  
**Conclusions:** Conducting mandatory, customized workshops in essential themes conducted in small groups encourage better participation and enhancement of essential competencies of a medical educator.

**Title:** The Use of Reflective Writing in Post Graduate Medical Education to Enhance Self-Regulated Learning and Developing Future PDP

**Presenter:** Raheela Yasmeen  
**Author:** Raheela Yasmeen  
**Institute:** Riphah International University, Islamabad, Pakistan  
**Abstract:**  
**Background and Aims:** Education is one of the most basic necessities of communities and an important base of continuous development. New and active teaching methods may increase learning and motivation of students. This study was conducted compare effect of lecture and problem-based learning (PBL) on nursing students learning in a pediatric course at Jahrom Medical University in Iran.  
**Methods:** This quasi-experimental study was carried out on 30 nursing students who had completed a pediatric course at Jahrom Medical School. Eight sessions of lecture was run for all students. Then they were randomly divided into two groups for PBL (15 students each group), and eight PBL sessions was run for two groups at two separate times. PBL approach was based on 7 trips Mastersched models. The data collection tool was a demographic data sheet and pediatric test in the form of multiple choice questions in mid-term exam and final exam  
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**Conclusions:** As to finding, it is recommended to apply active methods in education. It may increases student’s motivation and develops learning and retention and communication skills.
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Abstract:
Reflection is a metacognitive process that creates a greater understanding of both self and the situation so that future actions can be informed by this understanding. The aim of the study is to explore post graduate health professions education student’s experiences, thought processes and critical self-evaluation for self-regulating their learning process & development of future PDP through reflective writing skill. Out of 20 students of Master in Health Professions program batch 2014 of Riphah International University 15 students have submitted their ‘reflections’ as a part of their course work at the end of first teaching and learning session. The text database was collected, analyzed and coded manually and themes/categories were identified through qualitative narrative research study design. Finally conclusions are drawn based on the connections about its meaning personally and theoretically. Results shows that self-reflection has positive effect in the planning of future learning outcomes. But without an initial self-awareness and constant self-monitoring of thoughts and emotions no reflection can occur and effective teachers can help in developing this skill with practice & and use of constructive feedback. Students exercise self-regulation or self-directness through facilitative environmental conditions for their selves, using images of future events through PDP as guides and creating incentives for their efforts. Reflection helps the students in improving the quality of learning by creating self-awareness of their own thinking process in learning and identifying strengths and weakness in learning process through critically self-evaluating their selves. Self-reflection has positive effect in the planning of future learning outcomes. Reflection helps the students in improving the quality of learning by creating self-awareness of their own thinking process in learning and identifying strengths and weakness in learning process through critically self-evaluating their selves. Self-reflection has positive effect in the planning of future learning outcomes.

Title: Continuing Medical Education Leads to Learning and Change: An Experience of Rare- Riphah
Presenter: Abdul Khaliq Naveed
Authors: Abdul Khaliq Naveed, Raheela Yasmeen
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Title: Faculty Development Program for enriching the PBL process at Melaka Manipal Medical College
Presenter: Anand Kukkamalla
Authors: Anand Kukkamalla, Ciraj A.M., Shobha K.L
Title: Continuous Professional Development; What Is the Preferable Method?

Abstract: Continuous professional development (CPD) is the way professionals continue to learn and develop throughout their careers so they keep their skills and knowledge up to date and are able to work safely, legally and effectively (health & care professions council). In a world changing every day with new innovations in Medical Education field and the increase of work load among health care providers as a result of global shortage, CPD becoming more challenging leading to the need to choose the best method which can have the equilibrium between the pressure of workforce and the requirement of CPD.

The aim was to find out what health care providers’ opinion about the preferable method for CPD activities? A questionnaire was developed to try to find out what is the preferable method for CPD activities among health care providers?

It was sent by E-mail to all the hospital health care providers and the same form was printed and distributed to three other hospitals including general and teaching hospital. A pilot study was done prior to distribution of the questionnaire. The target group included different health care providers; physicians at different level of training and experiences, nurses in different units, technicians Laboratory, Anesthesia, Emergency Medical Services, respiratory therapist, radiology ...etc. Around 300 respondents to the survey; 259 completed forms and showed the following results as their preference for CPD:

- On-Job training 91 (35%)
- Short courses 67 (26%)
- Conferences 35 (14%)
- Morning Meeting 19 (7%)
- Ward round 15 (6%)
- Internet browsing 18 (7%)
- Books 5 (2%)
- Journals 5 (2%)
- Other 4 (Less than 2%)

On-job training was the major preference of 35% of the participants reflecting the importance of the educator’s role of the senior staff to teach the junior ones. followed by short courses for 26% of the participants, this preference indicates how the constraints of time affect the CPD.

14% found the conferences useful followed by a similar percentage for other methods; Morning meetings, Ward round and internet browsing as mentioned above. Interestingly, the books and journals coming down the list, it might be a reflection of new generation preference, which might lead to revision of the allocation of budget of the learning resources.

Institute: Melaka Manipal Medical College, Manipal University, Manipal, India
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Abstract: Problem-based learning (PBL) is an important Teaching Learning strategy in our system based curriculum. As a part of curricular changes, an attempt was made for temporal integration of subjects with PBL as a major vehicle for integration. Tutor training is imperative to equip them with desired PBL facilitation skills for better outcomes. Hence, a faculty development program (FDP) was organized.

1. To outline the challenges encountered by PBL facilitators in PBL sessions
2. To orient and strengthen the faculty skills on PBL facilitation and assessment
3. To orient and strengthen the faculty skills on PBL facilitation and assessment

79 faculty members enrolled for an interactive FDP. An outline on PBL; its process and assessment was initially revisited. Sessions included a brainstorming session to elicit challenges faced by tutors on aspects of PBL, a hands-on session on facilitation skills and an actual PBL session in which their facilitation skills were assessed by observers in each group. A peer validated questionnaire with open and closed ended questions was used to get feedback from participants and to analyze the effectiveness of the FDP. 65% opined that the session on role clarification of PBL group members was very useful. 65% felt that Seven jump approach was appropriately explained and very helpful. Session on assessment of PBL sensitized 51% of faculty members, 71% strongly opined that PBL facilitation session was extremely beneficial, 75% felt that the mock PBL sessions helped them to understand the process in a better way. Overall 76% of faculty members perceived that the workshop was very helpful and well designed. The FDP was found to be effective as faculty felt it useful in strengthening their knowledge and skills on PBL facilitation. The hands on interactive approach made each member participate. The faculty have requested for reviews and repeated orientation programs on a regular basis to keep them abreast in their role as PBL tutors.

Title: Continuous Professional Development; What Is the Preferable Method?

Abstract: Continuous professional development (CPD) is the way professionals continue to learn and develop throughout their careers so they keep their skills and knowledge up to date and are able to work safely, legally and effectively (health & care professions council). In a world changing every day with new innovations in Medical Education field and the increase of work load among health care providers as a result of global shortage, CPD becoming more challenging leading to the need to choose the best method which can have the equilibrium between the pressure of workforce and the requirement of CPD.

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On-job training was the major preference of 35% of the participants reflecting the importance of the educator’s role of the senior staff to teach the junior ones. followed by short courses for 26% of the participants, this preference indicates how the constraints of time affect the CPD.

14% found the conferences useful followed by a similar percentage for other methods; Morning meetings, Ward round and internet browsing as mentioned above. Interestingly, the books and journals coming down the list, it might be a reflection of new generation preference, which might lead to revision of the allocation of budget of the learning resources.
Title: Impact of Faculty Development Program on Academic Excellence at Shifa College of Medicine

Presenter: Riffat Shafi
Authors: Riffat Shafi, Iffat Zaman, Ayesha Rauf, Khurram Irshad, Ashraf Hussain, Syed Shoab Hussain Shah
Institute: Shifa College of Medicine, Islamabad, Pakistan
Email: shafiriffat@hotmail.com

Abstract: Background and Aims: In recent years, increasing attention has been paid to teaching as a valid form of scholarship. To facilitate high-quality teaching, more attention has been placed on faculty development programs. Faculty development is a planned program to improve an individual’s knowledge and skills in teaching, educational research and administration and to prepare institution and faculty members for their various roles. Our endeavors to improve teaching ways at Shifa College of Medicine, include development and application of student feedback mechanisms, professional development programs, and research into teaching. New trends and profound transformations taking place in academic medicine were accommodated by modification of the faculty development model. Our current faculty development model includes monthly faculty development seminars/regular faculty meetings and workshops/post graduate medical education/research/participation in national/international conferences. The evolution of faculty development program into a comprehensive, multilevel program culminated in a well-established medical education department, a significant numbers of scholarly articles published in prestigious journals and a rising number of faculties getting involved in various postgraduate studies. We aim to analyze the impact of faculty development program at Shifa College of Medicine through perceptions of faculty, information on their research publications, participation in national/international conferences and post-graduation qualifications in health professions education

Methods: A feedback questionnaire will be administered to all faculty members. Data will be gathered regarding faculty feedback, information on their research publications, participation in national/international conferences and post-graduation qualifications in health professions education. Structured interviews will be conducted with senior faculty members.

Conclusions: Conclusions regarding the impact of faculty development program on the academic excellence, will be drawn after the data is obtained and analyzed.

Title: Pathways for Development towards University Hospital Status – Experience from Qatar

Presenter: Nicola Frank
Authors: Nicola Frank, Anne Pitkaranta, Christiane Mueck
Institute: College of Medicine, Qatar University, Doha, Qatar
Email: nicola.frank@qu.edu.qa

Abstract: Currently, there is no consensus on detailed requirements for university hospital status. The study tries to define a clear development pathway from teaching to university hospital status, specifying key performance indicators (KPI) at critical review points. Analysis of affiliation agreements between medical schools and hospitals in Austria, Germany, Netherlands, UK, USA and selected GCC countries in the context of establishing the College of Medicine at Qatar University.

Differences between university and teaching hospitals were identified in five core areas and detailed KPIs described for the transition phase:

1. Based on strategic alignment, university hospitals also pursue a long-term collaboration including joint branding.
2. In addition to basic coordination, university hospitals align decision-making and governance through joint committee and leadership structures.
3. University hospitals require significant teaching commitment based on e.g. qualified teaching staff and protected teaching time, while medical schools influence appointment and promotion decisions of the university hospital.
4. Translational research and shared infrastructure are typical for university hospitals, while research is not necessarily a high priority of teaching hospitals.
5. Evidence of high quality of patient care is a prerequisite for any hospital to ensure an adequate teaching environment. University hospitals need a clear set of requirements to achieve and maintain their status. The study describes a goal- and KPI-driven approach to manage this process.
Title: Competencies and Sub-Competencies for Assessment and Coaching in Medicine

Presenter: Martha Illige
Authors: Martha Illige
Institute: University of Colorado, Denver School of Medicine, USA
Email: millige@gmail.com

Abstract:
The 21st century is the era for learners on the entire spectrum, from undergraduate medicine to practice, to demonstrate ongoing competence rather than to have competence assumed based on a degree or credential. More specific, measurable, attainable, relevant, and time-based goals (SMART) allow enhanced assessment and useful coaching for progress towards mastery. One process in the United States from the Accreditation Council for Graduate Medical Education involves the Milestones projects, developed over the past two decades. This workshop presents the example of Family Medicine (General Practice) Milestones with links to graduate medical education (residency) use since fall 2012 at Rose Family Medicine Residency and focusing on those sub-competencies most applicable to learners in other countries.

Title: Comparison of Mini-CEX and Clinical Long Case Assessment in Medical Students

Presenter: Kew ST
Author: Kew ST
Institute: International Medical University, Kuala Lumpur, Malaysia
Email: kew@imu.edu.my

Abstract:
Background and Aims: The Department of Internal Medicine, IMU, conducts MiniCEX to formatively assess Semester 6 students. Students undergo 2 Mini-CEX assessments at 3rd and 5th week. Students also undergo summative end of posting long case (EOP-LC) exam at 7th week. Average duration of a Mini-CEX is 30 minutes, inclusive of observation, presentation & discussion and feedback. As for the EOP-LC exam: students spend an hour to clerk patients un-observed. In the next 30 minutes they present, discuss and get feedback from their tutors.

Methods: This study is to compare students' perception of Mini-CEX versus EOP-LC exam. Semester 6 students, on completing their first posting in Internal Medicine, were invited to take part in a survey of 16-item-questionnaires, with 6 ratings from strongly agree to strongly disagree. A total of 74 students participated online through “Survey Monkey”.

Results: Students perceived Mini-CEX as a less anxiety-provoking assessment: they obtained useful feedback and the exercise helped them in preparing for other assessments. A larger proportion of students preferred the EOP-LC over Mini-CEX: as it is conducted at the end of 7-week posting, there is adequate time for assessment, it assesses students in a more holistic manner, and allows assessment of presentation skills. In comparison, Mini-CEX1 is conducted at 3rd week of their first posting in Internal Medicine when the students may not be ready for assessment.

Conclusions: Both Mini-CEX and long case exam drive clinical learning in medical students. They have complementary roles in early clinical clerkship.

Title: To Assess Evolution System in Public Medical Institution at Under-Graduate Level- The Sudent Perspective

Presenter: Humaira Sarfraz
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Abstract:
Evaluation is a systematic determination of a subject’s merit, worth and significance, using criteria governed by a set of standards. The study had basically a three prong agenda: to address written examination; viva examination and objectively structured or related examination techniques involving both internal and annual evaluation. The students’ perspective in this regard has often been neglected. Thus, this study will help to minimize the discrepancies in the existing evaluation system keeping in view the students’ perspective.

Objectives: To assess the evaluation system in King Edward Medical University keeping in view students’ perspective.

Study design: Cross sectional study design.

Place: King Edward Medical University, Lahore.

Study Period: 3 months. A cross sectional study was conducted.

A total of 120 subjects were recruited in the study. Selection was made on the laid down criteria after taking due consent. Pretested questionnaires were filled by the students of fourth year and final year. Data was collected, compiled and analyzed
through SPSS version 16. Among the students who filled in the research questionnaires (n=120), there were females (79) and males (41); with age below 21 years (50) and age above 21 years (70); educational fourth year MBBS (84) and final year MBBS (36). According to our study written examination was based on memory base learning (86.7%) and cramming of bookish knowledge (90.8%). A vast majority of the students proposed that written examination should be conceptual (90%) and scenario based (68.3%). Many were of a view that LEQs should be replaced with SEQs (76.7%). The study showed that students were largely dissatisfied with the outcome of viva examination (78.3%). A large majority of the students were of the view that viva examination should not determine the passing/failing of a student (83.3%). Moreover, they proposed to replace it with Structured Oral Questions from each topic (65%). OSPE / OSCE were found to be a satisfactory tool of evaluation and were regarded better than Traditional Practical Examination (84.2%). The students were dissatisfied with some aspects of the evaluation system particularly viva examination and certain areas of written examination. The pattern should be concept-based involving more clearly-defined clinical vignettes; the LEQs be curtailed and new techniques such as Structured Oral Exams and OSPE / OSCE be promoted.

Title: Assessment Tools in Human Gross Anatomy

Presenter: Mostafa Kandil Soliman
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Abstract:
Anatomical education modernized, not only in teaching and learning, but also in its assessment. Assessment represents an integral part of the teaching learning process. It is designed to determine the success or failure in achieving the general objectives contained in the curriculum as well as the strengths and weaknesses. To provide the best evidence of achievement, criteria such as validity, reliability, consistency, feasibility, reproducibility, utility, cost and practicality should be considered when choosing an assessment tool. Narrated review of published data on line about practical skill assessment in human gross Anatomy. All reviewed studies compared groups of students exposed to different teaching approaches, including active dissection, prosected material, simulated plastic models or a combination with computerized teaching aids.

Traditional practical skill assessment in Anatomy measures students’ ability to identify anatomical structures or correlate morphology with function. It consists of a circular stream of prosections, radiological images and dissections with pins pointing to specific structures (popularly referred to as ‘spotters’). Specific questions are then asked about where the pin is placed so as to identify a structure, its source of blood or nerve supply or function. With the increasing difficulty in obtaining cadaveric material; innovation is needed both in teaching and assessment. The old “spotter” examination has been criticized for only testing low level “identify” knowledge. The integrated Anatomy practical paper (IAPP) is a hybrid of the old “spotter” and an objective structured practical examination (OSPE) but it demonstrates how higher levels of taxonomy can be assessed, together with clinical features and integrates well with other disciplines. The IAPP has shown to be reliable and practical to administer. Evidence based on all retrieved studies OSPE was considered to be a reliable and feasible tool. Traditional examinations are being replaced with computer-based tools. Apart from formative assessment; computer-based examinations are increasingly being used for summative examinations. Several surveys have shown that computer-based tests were more popular than traditional tests. Online gross Anatomy practical examination using digitized images of the same material used in teaching were introduced. The impact of gender on computer related attitudes, abilities, and usage has been actively documented. Many findings in the literature indicated that males had more positive attitudes, higher ability, and used computers more. In addition to traditional spotter practical skill examination in gross Anatomy, an objective structured practical exam (OSPE), computer based and on line practical examinations were introduced which are more feasible and reliable than traditional one. As medical curricula now adopt an integrated teaching approach, which is not adequately reflected in assessment of Anatomy knowledge and skills; some schools use clinical vignettes to improve performance in Anatomy practical assessment. The impact of the addition of clinical vignette on students’ performance in Anatomy practical examinations was established and did not affected by assessment modality.
Title: End of Lesson Assessment (Eola): A Useful Tool to Enhance LGF Retention

Presenter: Iftikhar Qayum
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Abstract:
The lecture (Large Group Format, LGF) is fast disappearing as a mode of instruction due to purported insufficient retention of lessons by a large body of students. Its replacement, the Short Group Format (SGF) is however difficult to implement in terms of resources and time in many developing countries. Moreover the lecture offers a most convenient mode of instruction for the entire class and offers tremendous savings of time and costs of learning. It is useful to find ways and means to overcome the learning problems associated with this popular mode of instruction. The present study tries to assess the impact of a tool, the End-of-Lesson-Assessment (EOLA) on increasing content retention by students.

An EOLA program was initiated at Rehman Medical College Peshawar Pakistan since its inception in 2010 for all LGF sessions of all disciplines. Teachers wrote detailed lesson plans based on learning objectives and outcomes expected and included EOLA MCQs and SAQs to be attempted by students at the end of lesson. The Department of Medical Research (DMR) started an elective program in 2010 for teaching medical research to undergraduate medical students, the course content of which includes LGF, SGF, research projects, report writing and publications. The present survey is based on the results of all DMR EOLA for the class of 2010 for the years 2010-2012. Analysis of 10 randomly selected EOLA from different modules are presented with student attendance in different modules ranging from 44 to 88 percent. At a cutoff passing percentage of 50%, student passing performances ranged from 9% to 100% with a mean pass percentage of 70.5%. The lecture (Large Group Format, LGF) is fast disappearing as a mode of instruction due to purported insufficient retention of lessons by a large body of students. Its replacement, the Short Group Format (SGF) is however difficult to implement in terms of resources and time in many developing countries. Moreover the lecture offers a most convenient mode of instruction for the entire class and offers tremendous savings of time and costs of learning. It is useful to find ways and means to overcome the learning problems associated with this popular mode of instruction. The present study tries to assess the impact of a tool, the End-of-Lesson-Assessment (EOLA) on increasing content retention by students. The mean scores of students in all EOLA ranged from 22.0 ± 21.0 to 92.0 ± 15.0 with an overall mean of 63.1 ± 20.4. There was only one class failure in EOLA marks (giving a 90% successful retention) and three class failures in mean scores (giving a 70% successful retention). There were no reported problems from the students in terms of implementation of the EOLA. EOLA increased successful retention of lecture content from the reported ≤ 10% to a significant level of 70% to 90% in the present study. This is perhaps a reflection of the educational maxim of “Assessment drives learning” evidenced in an elective research program in which the students had no previous teaching or practice. Moreover, it is reflective of the greater attention given by students to the lecture content because they know that an assessment would be carried out at the end of the lecture. Another positive effect on teachers was better preparation of content, making it more assessment-focused and giving stress to portions of the lesson that were important from the point of view of examinations.

Title: The Utility of Formative Objective Structured Clinical Examination in the Training of Six Different Fields of Healthcare Providers – The Experiences in Mackay Memorial Hospital, Taipei, Taiwan

Presenter: Min-Shu Wang
Authors: Min-Shu Wang, Jiun-Lu Lin, Ching-Chung Lin, Yung-Wei Hsu, His-Hsien Hsu, Shou-Chuan Shih, Min-Shu Ms Wang
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Abstract:
Background: The Objective Structured Clinical Examination (OSCE) has become one of the standard evaluative tools to assess clinical competency in medical students. However, it is unclear to apply to a wider range of healthcare professionalism. This study is to evaluate the utility of OSCE in many healthcare providers in one single medical center.

Methods: OSCE evaluation scheme were implemented in the training of healthcare providers from six different fields of clinical professions (nurses, pharmacists, laboratory scientists, respiratory therapists, psychologists and
The study was a quasi-experimental interventional study that included 151 students from two different batches. Each batch had 10 PBL groups, 5 of which were randomly assigned as ‘intervention groups’ and received mini quizzes made of 7-8 questions at the end of every PBL case while the other groups were the ‘non-intervention’ group. The first group (73 students) was 3rd year medical students taking the Respiratory block which lasts for seven weeks (42 students as interventional group and 36 as non-interventional). The second group (78 students) was 4th year medical students enrolled in the Renal block which lasts for four weeks (42 students as interventional group and 36 as non-interventional). Quizzes were graded by the PBL coordinator. Any student missing more than one quiz was excluded.

In the Respiratory block, the intervention group had an average midterm score of 33.1±4 while the average final score was 67.7±8 and for the non-intervention group average midterm score of 32.4±4.4 while the average final score was 66.7±7. P-Value is .46 in the midterm and .59 in the final exam. In the Renal block, the intervention group had an average midterm score of 35.9±3.1 while the average final score is 66.7±12.8. For the intervention group, the results show an average midterm score of 35.2±6.4 while the average final score is 69.1±6.8. P-Value .5 in the midterm and .32 in the final.

Our study delineates the lack of objective effect on student performance measured by midterm and final exams by introducing quizzes after PBL sessions.

Title: Student Self-Evaluation of Anterior Crown Preparations; Descriptive versus Numerical Scale

Presenter: Alia Ahmed
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Abstract:
Acquisition of accurate tooth preparation skills is one of the basic learning outcomes in the Operative Dentistry Curriculum. Ability to evaluate oneself accurately is also one of the learning objectives of a competency based education.

Aim: The aim of this study was to determine the accuracy of self-evaluation of students of second year BDS compared to their instructor when asked to assess their crown preparations for the first time and to see if the format of the checklist, descriptive
or a number out of ten, was closer to the instructor’s evaluation.

**Methodology:** Sixty students of second year BDS of the Islamic International Dental College were asked to evaluate their anterior porcelain crown preparations according to a descriptive checklist out of ten. They were then asked to evaluate the same preparation according to a checklist which gave specific measureable instructions. Results were analysed by paired samples t-test and regression/correlation analysis compared to the senior teacher’s evaluation using SPSS 17 software. Evaluations of ten crown preparations were carried out by two instructors on both scales. The inter operator variability was calculated to be 0.75 which is good agreement so the rest of the evaluations were done by only one evaluator. Three months later the same evaluations were carried out by the same instructor on ten teeth to check intra operator variability. This was calculated to be 0.8. Despite differing levels of student competency, 75% of all ratings on the empirical rating scale were 7 or 8 out of 10. Students avoided giving themselves too much or too little marks regardless of the calibre of their crown preparation. The measurable rating scale showed significantly greater accuracy at a p value of 0.05. On average, all steps were over evaluated by students. Steps most well performed showed received less student- instructor rating differences and vice versa.

**Title:** Factors Influencing Medical Students' Self Assessment Accuracy

**Presenter:** Margaret Elzubeir

**Authors:** Sami Shaban, El Hadi Aburawi, Khalifa Elzubeir, Sambandam Elango

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**Abstract:**

**Background and Aims:** Assessment of one’s academic capabilities is essential to being an effective, self-directed, life-long learner. The primary objective of this study was to analyze self-assessment accuracy of junior medical students by examining their ability to assess their own performance on an MCQ examination.

**Methods:** 1st and 2nd year medical students (n=235) self-assessed pre and post-examination performance were compared with objectively measured scores (actual examination performance). Associations between accuracy of score prediction (pre and post assessment), and students’ gender, year of education, perceived preparation, confidence and anxiety were analyzed.

**Results:** Expected mark correlated significantly with objectively assessed marks (r=0.407; p<0.01) but with low predictability (R2=0.166). Self-assessed pre-examination score range was significantly different between males and females (p<0.05) with females expecting higher marks. Older students expressed higher levels of anxiety although this did not reach statistical significance. Preparation and confidence correlated significantly with actual examination score (p<0.05; r=0.459 and 0.569 respectively). Students completing the pre-examination survey achieved significantly higher actual marks than those who did not (p<0.05).

**Conclusions:** Gender, self-reported confidence and preparation are associated with self-assessment accuracy although this is not predictive of objectively determined outcomes among medical students. Findings reinforce existing evidence indicating that medical students are poor self-assessors. The study offers clear targets for change aimed at optimizing self-assessment capabilities.

**Title:** Implementing Multiple Mini Interviews (MMIs) as a Complementary Strategy for Admissions to Medical College

**Presenter:** Syed Shoaib Shah

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**Abstract:**

**Background and Aims:** Selection of the right students for medical studies has always been a matter of concern. The purpose of the study was to establish the merit of MMIs as a complimentary strategy in the selection of students who display better soft skills in addition to their academic performance. Medical College Admission tests have been repeatedly modified and pruned to ensure the selection of suitable candidates as future health professionals. Students demonstrating academic excellence in previous high school examinations are given preference and the weighting is given as mandated by the PM&DC. The MCAT is the additional screening test that is done and further shortlisting is done using these scores. In the admission process of October 2014 we implemented the Multiple Mini
Interviews (MMIs) to select shortlisted students demonstrating better scores in soft skills

**Methods:** A total of 273 candidates were selected for the MMI based on their performance in the National Testing Service MCAT. Each of the, eight in total, mini-interviews (communication skills, ethical decision making, critical thinking, standardized interview and health care management) took place in a different rooms. Each mini-interview station was of 7 minutes duration. At the end of that time the applicant moved to the next room. Stations were scored on a standardized checklist. These scores were collated at the end of each cycle. Feedback of the candidates was taken on predetermined and piloted forms. Applicants’ demographic data scores, feedback in the form of ratings and open comments were analyzed.

**Results:** The MMI was feasible with regards to finances, faculty & logistics and acceptable to the faculty and students (feedback analysis). The mean score in MMI stations were 16.58 (±3.70) & 15.67 (±3.61) in ethics, 15.55 (±3.87) in communication skills, 15.71 (±3.87) & 15.45 (±2.47) in standardized interviews, 13.75 (±3.62) in healthcare systems and 15.03 (±3.88) in critical thinking. The internal consistency reliability of the MMI was 0.67. There was a positive correlation between MMI stations. There was no correlation between MMI test scores and NTS MCAT scores (p =0.87, r=-0.001)

**Conclusions:** The MMI complements student entrance test and is a relevant strategy to assess student soft skills.

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**Title:** Implementation and Training OSCE in Semiology Course in Medicine school, Mazandaran University of Medical Sciences

**Presenter:** Fatemeh Ahmadinia

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**Abstract:**

**Background and Aims:** Assessment of clinical skills of medical education is a very difficult task. The assessment of clinical performance has been remarkably patient - centered and student - centered .In this regard, the “objective structured clinical examination " dynamic alternative to traditional approaches to clinical evaluation, especially in the medical students’ everyday Its popularity is increasing . Empowering students in the basics of clinical history taking and physical examination of patients and communication with patients at the medical school was correct.

**Methods:** The study population included 89 students of the Faculty of Medical Sciences, Mazandaran and Sample of a census and the results of the needs assessment, 100 % of students and confirmation of the Review Committee of semiology university administrators and medical form and decide on practical training in SKILL lab and clinical departments and implement the final test of the OSCE method Data were collected through a questionnaire -based study. Variable difference scores using T-test analysis was performed using SPSS soft.

**Results:** Students practical semiology course y in Skill Lab and clinical testing, with a final evaluation OSCE (new style), to students who have passed the previous method, the mean scores were higher . Evaluate different aspects of the skill station OSCE was administered. Reduce their anxiety, fairness and reduce the chance of an interest of the students in this way, the most important thing that most catches The final survey showed that satisfaction of students with the practical training with lots of 4/54 %, the Clinical Center with a frequency of 1/63 %, educational facilities and Models and mannequins with a frequency of 1/49% and empower teachers to communicate effectively in ward ENT with 79 % allocated to the highest frequency and degree of masters of science mastery women with the highest frequency ( 93 % ) were evaluated .

**Conclusions:** Add to semiology of practical training and assessment of concrete structures (OSCE) practical abilities of students, educational level, they will be active and effective way to achieve it medical education system is researcher.

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**Title:** Evaluation of Cognitive Levels and Item Writing Flaws in Pharmacology Modular Exams MCQs

**Presenter:** Sundas Tariq

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**Abstract:**

Multiple-choice questions (MCQs) are the most common assessment tools in all Medical Colleges affiliated with University of Health Sciences, Pakistan. This study was aimed to evaluate the cognitive levels and types of item writing flaws in pharmacology modular exams MCQs. The analytical study evaluated three modular exams comprising of MCQs with a total of 150 items
(MCQs) administered to third year MBBS students in the year of 2014 at the Department of Pharmacology, University Medical and Dental College, Faisalabad. All test items were reviewed for their cognitive levels and item-writing flaws. Items were classified as flawed if they contained one or more than one flaw. The cognitive level of the questions was determined by the modified Bloom's taxonomy. The proportion of flawed items out of 150 items ranged from 16% to 52%. Percentage of total flawed items was 28%. Most common types of flaws were 19.69% implausible distractors (n=26), 18.18% extra detail in correct option (n=24), 9.85% vague terms (n=13), 9.09% unfocused stem (n=12) and 9.09% absolute terms (n=12). The cognitive level of 97 MCQs (64.67%) was at Bloom's level I, while 29 (19.33%) and 24 (16%) were at Bloom’s level II and III respectively. Results of present study indicate that there is need of proper training of the faculty regarding construction of MCQs and review of test papers for item writing flaws before administering the test. The faculty should be encouraged and trained to construct MCQs for higher cognitive levels.

**Title:** Entrepreneurial Potential among Young Physical Therapists in Rawalpindi/ Islamabad

**Presenter:** Muhammad Naveed Babur  
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**Abstract:**
Evaluating the entrepreneurial potential of newly graduates of physical therapy, will give an insight of the potential contribution these professionals can contribute to the economy and private medical healthcare sector as a whole, which is a large emerging sector with great profits in Pakistan. Awareness about Entrepreneurship in physical therapy is negligible among its professionals. It will create awareness about the concept of entrepreneurship among the young professionals and aware about current trends and future insights as there is no service structure at government level and along with other major issues, physical therapists in large number are unemployed. The study will high light the importance of entrepreneurship among professionals of this profession on the track of entrepreneurship. A Cross sectional survey conducted from 100 physiotherapists from Rawalpindi / Islamabad including teaching and clinical departments. The survey covered six categories like Independence, self-discipline, creativity, drive and desire, risk taking and self-confidence. The study was completed in 6 months period, from February to October, 2013. The data as analyzed by the SPSS and Shaphiro Wilk test applied to analyze the data. 47 Physiotherapists scored in the category of excellent entrepreneurial potential, 30 in very good entrepreneurial potential, 19 in good entrepreneurial potential and 1 in average entrepreneurial potential.

Results showed large number of participants has score between 200 and 350 which, according to the scale, falls in very good and excellent entrepreneurial potential category. The very small percentage of participants scored greater than 350 or less than 200. The average value of 267 seems to be meaningful representative score which shows very good entrepreneurial potential. After the completion of the survey analysis it seems to be an urge in most of the young physical therapists of Islamabad and Rawalpindi of getting into some entrepreneurial activity and having an excellent entrepreneurial potential. Another issue is lack of facilitation from the government due to poor socio economic profile of previous governments so small business loans and micro-financing should be initiated by the government. Unemployment can be reduced to a significant level in Physical therapy community with the help of promoting such kind of activities. Furthermore an increase in the sample size can determine a more effective result at national level as well as a follow up study to see the entrepreneurial potential of young physical therapist. This study proved excellent entrepreneurial potential among the young physical therapist. The study recommends that institutes must play leadership role to enhance entrepreneurship activities among younger physical therapists through training and guidance. Awareness about finding resources for entrepreneurship must be created among young physical therapist through seminars and continuous professional development.

**Title:** Students Perception of Assessment for learning at IIMCT

**Presenter:** Komal Zulfiqar  
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**Abstract:**
Formative assessment is a range of formal and informal assessment procedures conducted by teachers during the learning process in order to modify teaching and learning activities to improve student attainment. It refers to a wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress. Formative assessments are routinely carried out at IIMC in each module by each department in order to support the learning process in students.

Aim of study is to assess the perception of students about formative assessment whether or not there is efficient and effective placement of formative assessment in each module throughout the year to augment learning & their role in enhancing students’ motivation for learning. A structured questionnaire was distributed to first, second and third year MBBS students who were given ten minutes to reply the questions. There were six questions regarding the scheduling, strategy and components of formative assessment were asked. Rest of the questions were regarding the effectiveness of formative assessment in learning. Data was collected and analysed by using SPSS 21. Response rate was 90%. It was found that more than 85% of students had taken their formative assessments, while 76% students agreed that formative assessments were taken in every module. Although only 10% students thought that they were not informed well in time. 75% of the students agreed as formative assessment is very helpful in their learning, while 80% students thought it is a source of motivation for learning. About 50% students were satisfied with feedback and remedial measures taken after formative assessments. Formative assessment is an important tool for learning for students but more efforts are required regarding planning, placement to make it a more effective mode for learning in medical students. Secondly constructive feedback further improves the learning.

Title: Using Situational Judgement Tests (SJTs) to Evaluate Non-Academic Attributes for Entry to Medical Schools and Medical Specialties: Evidence from International Studies

Presenter: Stuart Martin
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Abstract: SJTs are becoming a popular selection method for evaluating non-academic professional attributes across many high stakes settings, including medical education and training. This paper explores evidence for the reliability and validity of SJTs in medical education and implications for development across different international contexts. SJTs are machine-markable tests that require candidates to respond to dilemmas and judge the appropriateness of response options. SJTs were designed for medical admissions in the United Kingdom and Singapore, and entry into registrar posts in General Practice and Psychiatry. They aimed to assess important professional attributes, e.g. integrity, empathy, teamwork. Development included item writing, expert review, concordance and piloting. Importantly, each was contextualised to local culture and context. Results from live use in admissions show good reliability (UK: N=23884, α=.81-.86; Singapore: N=823; α=.66-.71) and candidate reactions. Early predictive validity evidence shows encouraging correlations with Year One tutor ratings (N=217; r =.34). For registrar selection, reliability is also favourable (GP: N=4386, α=.77-.82; Psychiatry: N=583; α=.77-.86). A GP SJT validity study found strong correlations with end of Year One performance (N=196; r =.56) and end of training exams (N=2292, applied knowledge: r =.69; clinical skills: r =.57). Evidence from four SJTs demonstrates their reliability, validity and international acceptability for medical admissions and specialty selection. Appropriate contextualisation is crucial to their effective use in medical education and training internationally.

Title: Value of Didactic Echocardiographic Sessions in Students’ Academic Performance during Cardiovascular block in a PBL Undergraduate Medical Curriculum

Presenter: Sultan Alhowti
Authors: Mohammed Alghamdi, Sultan Alhowti
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Abstract: Echocardiogram (echo) is a commonly used diagnostic tool in cardiovascular medicine. Echo has the ability to demonstrate the anatomic cardiac structures, the dynamic nature of the heart and pathological features of heart disease. The impact of didactic echo sessions on the academic performance of undergraduate medical students has not been studied.
The aim of this study is to evaluate the incremental value of an extra-curricular weekly, focused echo lecture on the students’ academic performance, during the Cardiovascular Block of a PBL based curriculum. This is a prospective, randomized, intervention-control, open labeled study with blinded endpoints. Seventy-seven male students were randomized into active or control study groups. Active study group received 6 didactic, multimedia echo sessions in addition to the standard curriculum which was delivered equally to both groups. Outcome of interest includes students’ GPA, total and domain-specific written exam marks at the end of block. Both groups were similar in the socio-demographic characteristics and baseline GPA. Eighteen out of 39 students (46%) in the active group attended all sessions. No statistically significant difference was found between the study and control groups in the end of block GPA, total marks or domain specific marks. Academic performance was significantly better among those students who attended all sessions as compared to those who did not, with obvious dose response effect. In comparison with the control group students who attended all sessions achieved significantly better score in physiology, pathology and clinical aspects. Echocardiogram is a potential educational tool to improve students’ academic performance. More studies with larger sample size are required to support our findings.

**Title:** Team Based Learning in Pathology: Impact on Test Scores and Student Satisfaction

**Presenter:** Sadia Hameed

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**Abstract:**

**Background and Aims:** Team based learning in medical education has emerged over the past few years as an instructional strategy to enhance the active learning and critical thinking. However, effect on assessment scores is a major concern for all stake holders while adopting a new teaching methodology. Satisfaction of students regarding a teaching methodology is also fundamental to its successful implementation. Therefore we planned this study to evaluate the impact of TBL on student’s test scores and to determine the satisfaction level of students regarding TBL as a teaching methodology.

**Methods:** A Quasi experimental study was conducted on fourth year undergraduate students attending Pathology course at University Medical and Dental College, Faisalabad in year 2013. The topic of Haematology was divided into two halves. First half included the topics of anemias and leukemias. The course of first half was covered in two TBL sessions of two hours and 15 minutes duration each (Total 4 hours 30 minutes). The second half of Haematology i.e. lymphomas and bleeding disorders was covered in 8 lectures of 45 min. duration each (6 hours). After completion of the course, students took a written test comprising of problem based SEQs regarding hematology. The test comprised of two segments with questions of equal difficulty, representing the two halves of the topic. Students’ scores in these two segments were compared by using t-test. The students were also given a validated questionnaire to assess their satisfaction about TBL. This data was analyzed by using SPSS version 20.

**Results:** The test scores were highly significant (p=0.000) in TBL group as compared to lecture group. In addition to positive significant relationship majority of students also agreed that TBL motivated them to learn Pathology (71.72%), promoted better understanding of the subject matter (68.92%), helped to gain in-depth knowledge of the subject (62.06%) and helped to remove misconceptions about the topic (65.51%). Sixty two percent students preferred TBL to didactic lectures.

**Conclusions:** Our study proved to have a significant impact of TBL on student test scores. Majority of the students were satisfied with TBL as a teaching methodology in Pathology and preferred it to didactic lectures.

**Title:** Understanding Caring Through Arts and Medicine Elective Course, University Of Sharjah, College of Medicine Approach

**Presenter:** Randa M.Mostafa

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**Abstract:**

Interest in the arts and medical humanities has led to heightened awareness of the role that the arts can play in medical sciences education. The study of arts and humanities can provide much of the context, values and meanings necessary to counterbalance the relentless reductionism of the biomedical sciences, which relay on knowledge...
that enhances the order and predictability of diagnosis, investigation and treatment. It helps medical students to be able to relate their studies and practices to real people and to their lived experiences of health, illness, disease, disability, death, suffering or recovery. This paper describes such an experience; an innovative 3 credit hours elective course arts and medicine taken by 35 students at medical and health sciences campus at the University of Sharjah, UAE; each September and January. The core objectives of the course are to develop the Medical and health sciences students’ awareness of the spiritual and humanistic components of healthcare, to encourage their curiosity about the human condition along with skepticism about the nature of medical truth; and to model acceptable moral behaviors. Through their exposure to the various media of the arts to explore and discuss the many aspects of the ethics of healthcare. The elective course has been met with high levels of enthusiasm and interest. It fills immediately and other students inquire about additional spots each semester. The evaluation of the course over 3 years has demonstrated a sharpening of the students’ awareness that art represents a significant reflexive source of insight into patients and doctors experiences within the socio-cultural and historical of medical practice.

Title: Teaching about Human Milk for Human Babies
Presenter: Martha Illige
Author: Martha Illige
Institute: Rose Family Medicine Residency, University of Colorado, Colorado, USA
Email: millige@gmail.com
Abstract:
Educators need to know about the importance of human milk and strategies for teaching this information to health professions learners as well as to patients and their families. The World Health Organization estimates that exclusive human milk feeding in the first six months of life could save the lives of five million children worldwide. This workshop begins with a 20 minute presentation about culture, biology of mammals (who give birth to live offspring and then lactate), human milk, nature and nurture. The group will use this as a case study to examine choices in presenting information to & quot; make it stick & quot; in memory and therefore be applicable to improved clinical practices.

Title: Medical Student Mandala Making for Holistic Well-Being
Presenter: Julie Chen
Authors: Jordan S. Potash, Julie Yun Chen, Joyce Pui Yan Tsang
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Abstract:
A growing trend in medical schools is the introduction of the medical humanities into a bio-medically oriented medical curriculum. This aims to enhance awareness of psycho-social aspects of disease and also self-awareness for self-care and patient care. A mandala-making art workshop (art made in reference to a circle) was introduced in the third year medical curriculum of the University of Hong Kong in the 2012-13 academic year. The objective of this qualitative study was to discover how creating mandalas might help medical students reflect on their current psychological state. As part of the Year 3 Family Medicine rotations in 2012-2014, medical students participated in an art-making workshop during which they created mandalas based on their current emotional state followed by discussion and reflective writing. The responses were analyzed and coded by assessing the compositional pattern and symbols of the artwork and the themes from the writings. The response rate was 74.7% (n=180/241). It appeared that students struggled with integrating conflicting perspectives as they attempted to reconcile their professional identity as doctors-to-be. They also expressed psycho-social concerns included navigating difficult emotions, requiring nurturance, handling endings, contemplating existential concerns and managing stress. Mandala making within a Jungian framework is suggested as a means for medical students to reflect on their emotional state and to achieve psychological balance.

Title: Making Under Graduate Curriculum More Meaningful
Presenter: Jan Mohammed A. Memon
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Abstract:
To improve the quality of Undergraduate Medical Education in line with changing Global Environments and its impact on population.
To bring about the meaningful change in Curriculum, specific to the geographical and local community. Result will have to be determined after the incorporation of desired addition / alterations in the Curriculum designing. The Graduate Doctor / Family Doctor be more competent and need based, who apart from Professional responsibilities play a leadership Role in Society.

**Title: Nutrition Education Curriculum for Training Physicians in Medical Colleges of Pakistan**

**Presenter:** Sumreena Mansoor  
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**Abstract:**  
**Background and Aims:** This study was designed to critically examine the place and extent of the nutrition education component in undergraduate medical curriculum.  
**Methods:** Single-stage sampling procedure was used for survey. Non-probability convenience sampling technique was used for interviews. Research questions addressed the course information, organization and implementation of the nutrition curriculum in medical institutions of Pakistan. We tried to enhance the reliability of the survey information where possible by gathering data directly from individuals involved in the development and/or implementation of the nutrition curriculum.  
**Results:** On average, in fourteen of the 15 schools students received 10.6 contact hours of nutrition instruction during medical school (range: 2–30 hours). Only 1 school received the required minimum 25-30 hours as recommended by the American National Academy of Sciences. Ninety three percent expressed the need for additional nutrition instruction at their institutions.  
**Conclusions:** With the involvement and oversight of faculty with training an interest in nutrition, integration of nutrition education can be successfully accomplished.

**Title: Medical Teachers’ Perceptions Towards Integration of Simulation Into Undergraduate Curriculum in Four Saudi Medical Colleges: Current Barriers and Future Directions**

**Presenter:** Shabnam Ahmed

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**Abstract:**  
**Background:** Simulation provides a safe, risk-free yet powerful approach to medical education1, 2, 3. Saudi medical schools are currently facing a shift in their teaching paradigm in medical education. There is rapid integration of simulation into their undergraduate programmes but with little empirical work to help guide this process.  
**Objective:** This study aims to evaluate the perception of medical teachers towards the integration of simulation in undergraduate curriculum and also identify contextual barriers faced by medical teachers. This cross-sectional observational study included medical teachers from four medical colleges. A questionnaire tested for validity and reliability, was administered to randomly selected sample of 150 faculty members. Response rate was 76%.  
**Data Analysis:** Data were analyzed using the SPSS statistical software (version 16). Descriptive statistics, t-test, and Pearson Chi-square analysis were used for data analysis. The degree of statistical significance is denoted by the p-value < 0.05. Simulation was perceived by medical teachers (Basic sciences/Clinical, respectively) as enjoyable (71.1%/75.4%), and effective tool for teaching (60%/73.9%) that can improve students’ learning outcome (88.8%/79.7%). Similarly, (91.1%/71%) of teachers think that simulation should be part of the curriculum and not stand alone one time activity. Teachers’ training for simulation based medical education (SBME) has created a significant difference in perception (p<0.05). Lack of teachers’ training, time, resources, and the need to integrate in medical curriculum are major perceived barriers for effective SBME. Results highlight the positive perception of medical teachers towards the integration of simulation in undergraduate curriculum. Prior formal training of teachers created a different perception towards SBME. Top perceived barriers for effective SBME include teachers’ formal training supported with time and resources, and the early integration into the curriculum. These critical challenges need to be addressed by medical colleges’ administrations and medical education departments to enhance the integration of SBME in undergraduate curricula.
Title: Social Media for The Medical Professional: A Curriculum for Trainees

Presenter: Sara M. Krzyzaniak  
Authors: Sara M Krzyzaniak, Gerald P Wickham  
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Abstract:
Professionalism is a core competency in postgraduate education, and a trainee’s online behavior is an important part of professionalism. A rapidly expanding number of social media platforms are widely utilized for both personal and professional applications. Medical professionals are responsible for creating and maintaining healthy personal and professional online identities. At the beginning of their training, many trainees already have an online presence through one or more social media platforms. Because online behavior is a component of professionalism and may have long-lasting repercussions for their professional career, it is critical to educate learners early in their career about responsible use of social media. One must establish strong self-efficacy in learners to help them identify appropriate social media behavior, as such we utilized Bandura’s self-efficacy framework. To develop self-efficacy, we employed mastery experiences, social modeling, social persuasion, and psychological responses. The curricular intervention involved a multimedia interactive lecture to elucidate recommended guidelines for responsible social media use. This was followed by a social media audit of one of their online accounts to identify possible breaches of the social media guidelines. Because social media is a dynamic environment, it is a dynamic construct for both learners and educators. Therefore, utilizing emerging cases in social media as a source of curriculum is critical. The trainees were given several real case scenarios involving questionable professionalism in use of social media and asked via an audience response system to judge the behavior as acceptable, questionable, or a violation of professionalism guidelines. Trainees have been surprised at the ways in which patient confidentiality is inadvertently breached. There is also rich discussion about the rights of an individual to post their opinions online versus their employer’s right to create guidelines about their online presence. Learners leave the course more aware of how their activities online can affect them personally and professionally. We anticipate that as we teach this to subsequent classes, residents will model appropriate online behavior for younger classes and create lasting change, thus fulfilling Bandura’s framework.

Title: Developing a Course that help Saudi Dental Students to Deliver Treatment to Patients with Disabilities

Presenter: Salma Al Shehab  
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Abstract:
Introduction: Patients with disabilities do present difficulties in maintaining good oral hygiene; this surely puts them at high risk to develop rampant dental disease. Generally, they require special adaptations during dental appointments. The Six – Step Approach for curriculum development, and the Module Design Format developed by Hamad (1985, modified 1992) were used. The latter contains different guidelines, such as: course title, duration, intended students, rationale, educational objectives, education strategies, work plan, students' assessment, evaluation, etc. Five major course units were developed accordingly, containing a total of 71 specific learning objectives, classified into three domains "cognitive, attitude, and skills". Program implementation will take 5 steps: Identifying resources, support and administration, addressing potential barriers, introducing the course, and program evaluation. The key questions of evaluation would consider: curriculum, faculty and instructors, students, program organization, and teaching/learning methods. The continuous assessment will rely on performance in PBL, tutorials, lab, and clinical sessions through the OSCE. The final assessment will be based on final written exam through MCQs, SAQs, and MEQs, and final case study presentation. Dental schools need to provide students with the knowledge, skills and positive attitudes to meet the oral health need challenge of ignored groups within their communities. The needs of patients with disabilities can be met through delivering of educational material as part of the curriculum.
Title: Revising Competency Statements to Outline a Roadmap for Curriculum Reform: A Saudi Dental School experience

Presenter: Shoroog Agou
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Abstract:

With the contemporary move towards a competency-based education in healthcare programs, many dental schools adopted a set of competency statements from leading dental education bodies in their region. While such an approach set a broad direction for curriculum development, at many instances however, it ignores the local context and the specific development needs of the dental schools. This would usually minimize the “buy-in” of local stakeholders, and result in gaps of understanding and application amongst faculty, students, and graduates, and hence, hindering the real efforts for development. Grounded on adult education theory and using a novel approach to envision the role of competency statement in curriculum integration, this multi-phase project aimed at developing a contextualized set of competency statements to address the unique development needs of the dental curriculum at King Abdulaziz University Dental schools (KAUF D).

Phase I: Competency-based outcomes of leading dental authorities were located from around the globe. A comprehensive review was conducted to compare the competency statements. A through “document analysis” was carried out to identify the theoretical underpinning and the grounding philosophy of the competency statements. Global trends and unique contextual features were identified.

Phase II: A unique set of competency statements were selected to lead the first stage of curriculum development and to address the recommendations of major accrediting bodies in the dental field. Workshops with stakeholders and multiple focus group meeting were conducted to finalize the first version of KAUFD competency statements. Next, was to conduct a competency coverage analysis by mapping the curriculum against the competency statements to assess the current status.

Phase III: After two academic cycles of addressing the individual disciplinary gaps in achieving the desired competency statements, it was time to turn to the integration needs of the curriculum, hence, a third phase for reviewing the competency statements in collaboration with the departments was conducted, in order to facilitate a smooth integration process in this traditional discipline-based curriculum. A disease-based approach to presenting and mapping the competency statements was adopted to achieve this goal.

Phase IV: The final set of competences will be published. Constructive alignment with teaching and assessment activities is to be verified. Outcomes are to be assessed, and further needs for developments are to be identified. As a result of competency statements revision and competency coverage analysis, missing elements in the curriculum were identified; areas of redundancy and controversies were located and addressed. Recommendations for developments were shared and discussed with the departments. The biomedical sciences curriculum was revised and sequenced. Opportunities to plant seeds of vertical and horizontal integration were located. Elements of behavioral sciences and cultural competence were threaded in the curriculum. More importantly, the third phase of development, allowed for a smooth trans-disciplinary teaching that is centered on dental diseases, rather than dental disciplines. This approach to curriculum reform allowed for a real and meaningful, context specific curriculum development at KAUF D.

Schools interested in moving from a discipline-based curriculum towards an integrated curriculum need to contemplate a transitional approach that considers the local context and the unique needs of the school, its culture, and the local community. The authors would like to acknowledge the support of KAUFD dean, Prof. A. Mira, KAUFD Vice Deanship for Academic Affairs, Prof. M. Ghulman, and KAUFD department chairs, and faculty members for their support of the curriculum reform efforts at KAUFD.

Title: Embarking a Curriculum Change Faculty Perceptions of a Medical School’s Organizational Readiness

Presenter: Tanzeela Khalid
Authors: Tanzeela Khalid, Musarrat Ul Hasnain, Sumera Badar
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Abstract:
In response to WFME global standards, Pakistan Medical & Dental Council has given a deadline to all medical colleges accredited with it, to shift to integrated modular curriculum by 2016. Literature suggests that a high level of organizational
readiness is required to sustain a successful change in healthcare. We undertook this study to determine faculty’s perceptions of organizational readiness for this curriculum change in our institution and to compare the perceptions of those actively involved in change process with those of faculty members not actively involved. Medical School’s Organizational Readiness for Curriculum Change (MORC) Questionnaire, a validated instrument comprising of 53 items was used. Generalizability analysis of MORC requires 5 to 16 faculty members to reliably evaluate a school’s organizational readiness for change. In this cross sectional survey, 24 faculty members working in University Medical & Dental College, Faisalabad were requested to participate, using purposive sampling, in May 2015. Twelve respondents were members of the institutional curriculum committee actively involved in the change process and 12 members were not directly involved. Data were analyzed using SPSS version 20. Means and standard deviations were calculated for each item with 1= strongly disagree and 5= strongly agree. The two negatively phrased items were reverse calculated. T-test was used to compare the responses of faculty members. P value <.05 was considered significant with a confidence interval of 95%. Respondents included faculty members from both basic and clinical sciences. Teaching experience ranged from 1 to 37 years. Regarding motivation for change, pressure from accreditation bodies like PMDC was considered the main pressure for change (mean=4.54, SD=.77). Faculty members agreed that this change will improve knowledge and skills of our graduates (mean=4.00, SD=.83) but were unsure whether it is tailored to the needs for change in our school (mean=3.5, SD+.83). Fear of losing power to control teaching in their discipline was considered an important barrier to innovation (mean=4.17, SD=.91). The responses of faculty members actively involved differed significantly from those not actively involved in seven items only. Those not actively involved disagreed that staff members are sufficiently informed about the reasons for change, as compared to actively involved members who agreed to it. Faculty members not actively involved were unsure of the pressure for change by accreditation authorities, impact of change on institution’s (inter)national ranking and presence of incentives for faculty supporting change. MORC questionnaire can give important information about faculty’s perceptions of organizational readiness for change. In faculty’s opinion, the proposed change to integrated curriculum is being undertaken largely due to external pressure by accreditation bodies. Faculty members consider it a positive change likely to lead to better knowledge and skills of students but are not sure of their capability to bring it successfully. Reasons for change need to be better communicated to those not actively involved in the process.

Title: Professionalism, Medical Ethical and Holistic Curriculum

Presenter: Mohammad Iqbal Khan
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Abstract:

Background and Aims: The growing interest of learning and teaching professionalism is due to its insightful impact in only a matter of minutes. Professionalism is that eminence which drives a person’s appearance, personal and professional interactions, and which provides others with a first impression. The greater the degree to which a person exemplifies professionalism, the easier it will be for him to be set apart from people around him. This brilliant attribute will cause his superiors to take notice. The more a person or organization displays professionalism, the more opportunities for success it will have. In order to become an outstanding physician, we must be able to do more than treat illness and disease. We need to be acquainted with how to relate to the people around us, both patients and staff. The physicians are no more considered, persons who mere visit the patients and manage their ailments. In modern times, physicians must also be capable business people. This means running our practices and offices in a professional manner. Teaching errands related to medical professionalism should be foremost in the minds of medical teachers. Ignorance to these facts will have momentous impact on the medical profession on one hand and dreadful consequences in the society at large scale.

Methods: There is no comprehensive data available about medical schools: how professionalism and medical ethics is being taught at different levels of under and post graduate medical education. We designed the holistic integration of medical curriculum with professionalism at every year of graduate programs while similar assimilation continues at post graduate residency programs. As a part of
graduate program the study of medical ethics spreads to five years i.e. in first two years, general understanding of ethics, its importance, human behavior, disease and its perception, interpersonal relationships and general conducts and behavior of a medics are being integrated with all modules from foundation module to the end. In third year patient-physician relationships, the ethics of clinical practice and relationship with allied specialties and patients’ rights are included. In fourth year ethics of human and animal research and relationship with pharmaceutical and associated industries are inculcated. In final year contemporary issues and ethical concerns, medical jurisprudence and characteristics of physicians are being integrated with different modules and during clinical clerkship. More detailed studies of professional ethics: as a science and research subject and how to covenant with the future research findings in ethical environment and finding best practices in professional life. At all levels believes, faith and moralities are finely integrated to meet the requirement of particular society. Assessments of professionalism are designed with the end blocks examinations in the form of MCQs, SEQs and Integrated Practical Assessments (IPA).

**Results:** Though it is utterly important to acquire knowledge and expertise of different medical specialties but correct understanding and application of affective domain of medical profession is foremost important. Being an important component of medicine’s contract with society, professionalism is required to make good decisions for our patients based on the evidence in the literature, but we need to apply those decisions in a way that is professionally upright and ultimately helps our patients. Certain behaviors early in medical education do correlate with unprofessional behavior during a physician’s career. We must be aware about such undesirable behaviors and let our students and trainees know why we’re so worried about them. Professionalism with training and acquiring expertise must be integral part of under and post graduate medical curriculum. The achievement in professionalism and medical ethics must reflect in the final transcripts bestowed to the graduates after their exit examinations.

**Conclusions:** Take-home messages: Medical Ethics & Professionalism instruction and assessment is an integral component of medical education. It is quite possible even in a resource constrained environment, to prepare professionally upright and ethical physicians without much extra spending for this purpose.

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**Title:** New Learning Programs in an Emergency Course for the Sixth Year Medical Students at Medical Educational Center (MEC), Princess Narathivas University (PNU), Songkhla Thailand

**Presenter:** Pongsatorn Asanasak

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**Abstract:**

**Background and aims:** According to our previous emergency medical course used in the PNU especially for the 6th year students, it mainly focuses on ward work and on-hand practices underclosed supervision from internists and medical staff. There are problems in limited practicing time and unorganized cases which result in inadequate learning. In 2012, the new learning programs were developed in order to improve learning outcomes.

**Methods:** The new learning programs were developed by reviewing and matching all the learning objectives under the Thai medical council guidelines with objectives of the course. Then new and concise programs were established by using small- group teaching and effective self-directed learning. The programs include 4 activities: ER audit, ER Interesting cases, ER spotdiagnosis and ER guidelines application. After two years of applying the new learning programs, students’ satisfaction, enthusiasm and abilities toward the course were assessed by students’ feedback, completion on work sheets, average academic scores and directed observations from staff.

**Results:** Preliminary reports for 2 year results, students’ feedback, and completion on work sheets and average academic scores increased and improved dramatically. Eventually quality of cares in emergency department and overall students’ ability also improved according to directed observations from staff.

**Conclusion:** ER audit, ER Interesting cases, ER spot diagnosis and ER guidelines application are helpful to improve learning outcomes in emergency medical course for the 6th year medical student in the PNU.
Title: Rural Medicine Program in Brazil: Development and Validation of a Competence Framework for Undergraduate through Delphi Technique

Presenter: Eneline Pessoa
Authors: Eneline de Andrade Héricaio Gouveia, Taciiana Duque Braga, Sandra de Andrade Gouveia, Bruno Henrique Soares Pessoa
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Abstract:
Medical School may have an important role in retention of physicians in rural and remote areas. However, most of the clinical practice in undergraduate courses still occurs in tertiary hospitals and large centers. In Brazil less than 15% of medical schools have a structured and regular rural stage, and there is no evidence of a competency-based curriculum in this field of learning. Aim: To develop a competency framework to a longitudinal rural medicine program in medical schools of Brazil Method: A two rounds Modified Delphi Technique was developed. Firstly, it was designed a structured questionnaire based on literature review, which was submitted to opinion of the panelists, members of the GT MFC RURAL (n=20) for analysis of the relevance of competences through a Likert scale of five points. Consensus criteria for inclusion of a competence in the framework was &quot; Very Important &quot; or & quot; Indispensable & quot; of ratings as & quot; Very Important & quot; or & quot; Indispensable & quot; Competences that did not reached consensus were subjected to second round Delphi for reassessment of the panelists via dichotomous questions. Results: There was a higher number of panelists teachers 85% (n=12). The questionnaire prepared, consisted of 26 core competencies and 158 secondary skills. After evaluation of the experts, all 26 core competencies were classified as relevant, and only eight secondary did not reach consensus. There was no suggestion of new skills by the panelists. From competences that did not reach consensus in the first round, seven were excluded in a second evaluation, the majority related to hospital procedures. Conclusion: A Competency Framework was developed and validated for a Rural Medicine program consisting of 26 core and 158 secondary competencies. This framework is an important step in the construction of curricula based on competence in rural medicine in Brazil, and contributes to enlarge the restricted international literature for skills in rural medicine during the undergraduate course.

Title: Medical Students Workload: Implication to the European Credit Transfer and Accumulation System in Integrated PBL Curriculum

Presenter: El-Sayed Emad Ahmed Nosair
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Abstract:
Student workload (SWL) is one of the main elements of curriculum design, and its measurement is problematic especially in an integrated problem-based-learning (PBL) environment. It is the foundation of determination of the European Credit Transfer and Accumulation System (ECTS) units which are awarded upon students’ achievement. As ECTS depends on the notional, and not on the contact SWL, it has been more flexible for meeting the needs of the modern innovative educational trends. The lack of suitable credit system in our medical PBL institution was the drive for the change project. The aim of the project was to identify the nature and amount of students’ independent learning activities in order to assign the ECTS units to our medical PBL program components. HSE OD change model was used, where focus group interviews and log diaries were employed for years two and three undergraduate medical students. Based on that, calculations were then used for allocating ECTS to the studied units. The response evaluation model and thematic description approach were used for data collection and data analysis respectively. The broad variations of the independent studying activities have confirmed the extra work activities in an integrated PBL programs. The measured notional SWL was about 55 and 58 hrs./week, which equates 29 and 31 ECTS/semester for years two and three respectively. In conclusion, measuring SWL is an indispensable need in PBL programs for avoiding the drawbacks of students overload. Assigning ECTS improves program quality assurance, and has an educational impact which reflects on improving students advising system, students’ perception of workload, the teaching and assessment methodology, and then ensuring an effective quality of learning. The impact on organization would appear in improving the quality assurance of the program, and increasing students transfer and mobility. As a result, this would enhance the international links.
and communication by setting joint curricula with other similar organizations with PBL programs.

**Title:** Evaluating Near-Peer Teaching Sessions at Imperial College London

**Presenter:** Akib Khan

**Authors:** Akib Khan, Olivia Lucas, Laura McGowan, Matthew Hawkins, Thomas Pepper, Kerala Adams-Carr, Frederick Pimm

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**Abstract:**

The UK General Medical Council encourages clinicians to teach medical students. We aimed to deliver a seven-week near-peer teaching course for third year Imperial College London students. We evaluate the effectiveness of the near-peer teaching style. Seven junior doctors from a range of UK universities organised teaching sessions covering the Imperial College London curriculum, aiming to provide high-yield clinical examination knowledge and skills. The course was open to all third year Imperial medical students. Out of a total of 130 applicants, 30 were selected due to venue limitations. Following each session, participants completed a survey to assess participant confidence, knowledge improvement and session delivery. There were a total of 107 qualifying responses. There was improved confidence in 72.8% (n=78), no change in 25.2% (n=27) and decreased confidence in 1.8% (n=2). On the marker of ‘knowledge’, 45.8% (n=49) stated “I learnt many new things”, 52.3% (n=56) state “I learnt some new things”, and 1.8% (n=2) felt “I did not learn anything new”. The near-peer presentations were rated as ‘excellent’ in 65.7% (n=70) and ‘very good’ in the remaining 34.6% (n=37) of responses. Our data indicates that near-peer teaching sessions improved student confidence in clinical examination. Furthermore, it enabled students to broaden their knowledge and confidence in each specialty. Medical students highly commended junior doctor presentations.

**Title:** Factors Determining the Choice of Specialty Careers in Final Year Medical Students in Pakistan

**Presenter:** Madiha Sajjad

**Authors:** Madiha Sajjad, Rehan Ahmed Khan

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**Abstract:**

Choosing a specialty career in health professions has an impact on the healthcare needs of the country. This study investigates different career choices and the reasons behind choosing them. A 20 items questionnaire based on Likert scale, was distributed among the students of final year MBBS to achieve this objective. Response rate of students was 82%. Medicine, surgery and gynaecology were the top careers choices among students. Family practice was the least chosen specialty. The top 3 reasons to choose a specialty were aptitude, better understanding of the subject and work satisfaction. Parents in the same field, easy career progression and specialty related illness in the family were the least chosen reasons. Students should be made aware about importance of family practice as a career choice. Medical curricula should emphasize on the importance of family practice.

**Title:** Self-evaluation of integrated medical curriculum using WFME standards for basic sciences as a benchmark

**Presenter:** Rehan Ahmed Khan

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**Abstract:**

**Background and Aims:** Accreditation of a medical school on global standards requires meeting the standards defined by International bodies. It is very helpful to internally evaluate a curriculum before it is subjected to external evaluation

**Methods:** A theoretical framework based on WFME standards for basic sciences was developed to evaluate the curriculum in a medical school who had completed one cycle of complete transformation from discipline based curriculum to integrated modular curriculum. Data was collected through archival research and results were reported using content analysis.

**Results:** Minor and major deficiencies were found in basic and quality standards as defined by world federation of medical education. These included imbalance between distribution of educational strategies, absence of continuous renewal, major share of summative assessment than formative assessment and lack of curricular implementation plan.

**Conclusions:** Self-evaluation using WFME standards as benchmark can help identify
Title: Faculty and Students perception of Pre-Professional program in King Saud Abdul-Aziz University for Health Sciences using World Federation for Medical Education areas

Presenters: Amal Aishubeki, Abdolmohsen Alkushi, Aamer Omair, Reem Alsubait Amal
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Abstract:
The increasing globalisation of health sciences, as manifested in the rise of migration rate of health care providers and educators across the borders, has inflicted a wave of quality assurance strengths in medical education. This has underlined the need for definition of standards and introduction of successful and transparent accreditation systems. These standards are the basis of quality improvement in medical education and all the six WHO/WFME regions use those standards as a template for regional accreditation system. A strategic partnership was formed in 2004 between the World Health Organization (WHO) and World Federation for Medical Education (WFME). This partnership reflects the importance of combined medical education and the healthcare delivery sector to improve medical education quality. King Saud bin Abdul-Aziz University for Health Sciences (KSAU-HS) was established in April 2005 in Riyadh, Saudi Arabia, in order to prepare high school graduates for health career in an academic setting that enhance excellence in teaching, research and patient care. The College of Science and Health Profession (COSHP) within this university was developed to equip high school graduates in two preparatory academic years with the educational tools important for future health studies in the professional programs of the university.

Aim: The purpose of the study is to identify within the KSAU-HS’s pre-professional program the aspects and quality from both faculty and students perception using Basic Medical Education WFME Global standards for Quality Improvement.

Objectives:
1. To identify areas that need improvement within the KSAU-HS’s pre-professional program from both faculty and students perception using Basic Medical Education WFME Global standards for Quality Improvement
2. To compare the perception of the male and female pre-professional students.
3. To compare the perception of batch 11 & 12 pre-professional students.

Cross-sectional survey, using a five-point Likert scale indicating the ‘level of effectiveness’ in each educational area in the pre-professional program. Faculty questionnaire included all nine WFME educational areas and Students questionnaire included selected five WFME educational areas.

- A total of 423 students responded to the questionnaire and 67 faculty members. This study indicated that faculty rates the effectiveness of WFME subareas being high in three main areas: Mission and outcome (51%) Educational Setting (81 %, ), Students Assessment (66%).
- The lowest effectiveness sub-areas rated by faculty were for two main areas related to Educational Resources (18%), Governance & Administration (22%).
- There were two main areas in which both the faculty and students had a low rating: Program evaluation (29%) and Students area especially related to the Students counseling unit (26%).
- Male Students rates the effectiveness of the program higher than female students on: curriculum includes elements in scientific thinking and research methods (40%, 31%), biomedical sciences development (38%, 28%), learning environment (62%, 33%), program evaluation (35%, 18%), students involvement in planning of the program evaluation (23%, 8%). Batch 12 perception was higher than batch 11 on: curriculum and instructional methods (51%, 41%), students support and counseling unit (33%, 20%), students activities encouragement (41%, 28%), teachers encourage students to engage in medical research (38%, 23%).
- This study indicates that the program needs further development and more focus in a wide range of quality assurance besides basic educational standards, such as Program evaluation, Students, Educational resources, Governance & Administration.
Title: Evaluate the Effectiveness of Workshops of Clinical Skills Based on the Kirkpatrick Evaluation Model at Qazvin University of Medical Science in 1390

Presenter: Mollaei Yazdanabadalia Alireza
Authors: Bahramkhanie Leila, Mollaei Yazdanabadalia Alireza, Bahramkhanie Farideh, Karbasi Motlagh Maryam, Rahmati Najarkolai Atena
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Abstract:
Background and Aims: Evaluation is an integral part of the systematic attitude to the education. It is important to evaluate the effectiveness and usefulness of the training program which can provide an essential basis for planning. In recent years, several models have been developed to assess the effectiveness of training that among them Kirkpatrick model has more integrity, acceptance and applicability. This study examined the effect of clinical skills workshops based on Kirkpatrick model. This model has four levels (Reaction, Learning, Behavior and Results). Given the diversity of workshops, after consultation with the faculty, following workshop were chosen, (Urethral catheterization, Intravenous therapy).

Methods: Study population was all interns participating in workshops in clinical skills center of Qazvin University of Medical Sciences in 1390 (n=108). Sampling was census. Descriptive method was used in assessing reaction. Students' satisfaction toward workshops was examined. Tool was researcher made questionnaire based on the Likert 5 point scale. In order to assess the learning level, pre-test and post-test was used. The skills and knowledge of students were compared after and before training in clinical skills center. To assess Change in behavior and achieving results, direct observation in real environments (hospitals) has been used. The data were compared with the previous situations. Learning skills through the checklist Likert scale were evaluated by clinical senior assistants while they had observed learners’ performance. Also, their knowledge evaluated by MCQ. Face and content validity of tool was approved by experts and educational specialists. They also evaluated tool’s reliability so Cronbach’s alpha was 0.85 which was acceptable. Data analyzed by SPSS software: (descriptive statistics, paired and independent t-test). So the effectiveness score of the workshops has been reported. Finally, the workshop was divided into three parts: effective (mean score≥60), conditional effective (60> the average score ≥40) which required retraining courses and non-effective (40> Average rates).

Results: Most of the participants were female (55.5%). The average age was 25.26 ±2.18. In general, the level of students satisfaction toward workshops was over 80%. In evaluating the reaction level, the highest scores were allocated to: workshop organizing method (4.56 ±0.92), scientific level of teachers (4.53 ±0.64) yet, the lowest score was dedicated to the workshop run time. Knowledge and performance scores were significantly different before and after the intervention. (p<0.05). Compare skills before and after the training showed that there were differences in scores: for urethral catheterization the difference were 28 in hospital and 32 in skill lab, for Intravenous therapy difference were 9 and 8 in hospital and skill lab respectively. From 18 workshops, 13 were effective (72.22%) and 5 (27.78%) were conditional effective.

Conclusions: Kirkpatrick model provides a practical framework to evaluate the effectiveness of training programs. The results indicated that although workshops were not completely effective, yet the effectiveness of workshops in Qazvin medical university was high and acceptable. Results of conditional effective workshops, after reviewing essential corrective actions were defined. So actions were announced to teachers for implementation. Given that the level of behavior and results were more challenging in comparison with the reaction and learning levels, it is recommended to repeat evaluation at the right times, in order to ensure the existence of permanent behavioral changes as well as achieve the expected results.

Title: Linking Medical Faculty Stress / Burnout to Willingness to Implement Medical School Curriculum Change: A Preliminary Investigation

Presenter: Mandana shirazi
Authors: Zeinab Arvandi, Amir Hossein Emami, Nazila Zarghi, Sagar V Parikh, Mandana Shirazi
Institute: Tehran University of Medical Sciences, Tehran, Iran
Email: mandana.shirazi@ki.se

Abstract:
Background and Aims: Balancing administrative demands from the medical school while providing patient support and seeking academic advancement can cause personal hardship that ranges from high stress to clinically recognizable...
conditions such as burnout. Regarding the importance of clinical faculties’ burnout and its effects on different aspects of their professional career, this study was conducted aimed to evaluate the relationship between stages of change of Tehran University clinical faculties and their burnout based on the modified stage-of-change model.

**Methods:** This descriptive analytic study was conducted on 143 clinical faculty members of Tehran University of Medical Sciences to assess correlation between faculties’ readiness to change and their level of burnout. Participants were asked to complete three questionnaires: stages of change, based on policies from the Iranian Ministry of Education and medical education guidelines regarding faculty duties, Maslach Burnout Inventory, and General Health Questionnaire. Data were analyze by SPSS:16 using non parametric statistical tests such as multiple regression and ICC (Intra class coefficient) and spearman correlation coefficient test.

**Results:** According to the findings, significant relationship was found between faculty members’ readiness to change and the subscales of occupational burnout. In other words, participants with low occupational burnout were more likely to be in the action stage, while those with high burnout were in the attitude or intention stage, which could be understood as not being ready to implement change. There was no significant correlation between general health scores and stage of change.

**Conclusions:** As it is highly probable that occupational burnout reduces readiness to change, it is recommended to consider burnout level in recruiting new faculty members.

**Title:** Development of Career Coaching Model for Medical Students

**Presenter:** Yera Hur
**Authors:** Yera Hur, Ara Cho, Sun Kim, Sun Huh
**Institute:** Konyang University College of Medicine, Daejeon, South Korea
**Email:** med_edu@naver.com

**Abstract:**
**Background and Aims:** Deciding on a future career path or choosing a career specialty is an important academic decision on medical students. The purpose of this study is to develop a career coaching model for medical students.

**Methods:** There were three stages in developing the model. The first stage was to do a systematic review of previous researches on the subject. The papers were analyzed by its purpose, steps, task elements, category, and extracted the core themes of career coaching. The second stage was to execute a need assessment. Five medical schools participated and 629 medical students answered the survey. The third stage was to develop a career coaching model based on the first two stage results. Focus group interviews (FGI) with medical education experts and student counseling experts were done to finalize the model.

**Results:** The career coaching stages were defined as three big phases such as the “Crystallization” period (pre-medical Year 1 and 2), “Specification” period (medical Year 1 and 2), and “Implementation” period (medical Year 3 and 4). Goals, tasks, and competencies were identified for each stage and specific topics for each stage were also itemized. Connections between institutional support system and medical curriculum were elucidated.

**Conclusions:** The career coaching model of medical students can be used in programming career coaching contents, and also in identifying the outcomes of career coaching programs in institutional level.

**Title:** There is no Quality of Medical Education without Philosophy and Science - Do You Support it?

**Presenter:** Eisa Ali Johali
**Author:** Eisa Ali Johali
**Institute:** College of Applied Medical Sciences, King Saud University, Saudia Arabia
**Email:** ejohali@ksu.edu.sa

**Abstract:**
Johali (1995 and 2012) was starting deliberating on the problems of the Saudi Arabian Nursing and Applied Medical Education (SANAME) mainly the debate between the Saudi nursing education and nursing service regarding the quality of the graduate nurse students and the dilemma of the gap between theory and practice. Reflection on experience throughout studying the MA (Ed) courses and theses (Johali1995) suggested that “the Western philosophy and science of curriculum, teaching and learning may guide SANAME towards a factual way to overcome these considerable problems and to assure quality as well. In addition to the Documentary Analysis of the place of philosophies and sciences in the curriculum of Saudi Arabia Nursing and Applied Medical Education (SANAME), the study conducted an electronic survey in one of the most popular professional site the LinkedIn, to validate its vision, using the following 5 scales master polling question:
Based on Johali (1995), this study looking to validate its vision that "There Is No Quality of Education Without Philosophy and Science" as follow:

Eisa Johali Its My Vision that "There Is No Quality of Education Without Philosophy and Science" - Do You Support it? Posted 10 months ago

- 21 votes
- Totally Disagree
- Disagree
- Totally Agree
- Agree, to some extent
- Other please clarify

The result of the documentary analysis of the Saudi Applied Medical Curricula shows no intention of philosophy and science of education, there no clear philosophy and theories of education except few in nursing programmes. Meanwhile the result of the survey reflects high intention of my vision that "There Is No Quality of Education Without Philosophy and Science of Education": Eisa Johali Lecturer at KSU CAMS; Posted March 22, 2012 - 2013

- 250 votes
- Totally Disagree 20 (8%)
- Disagree 20(8%)
- Totally Agree 170 (68%)
- Agree, to some extent 30 (12%)
- Other please clarify 10 (4%)

Despite its limitation mainly as a first study in this precised field, the study achieved its idealist vision. Although philosophy and science of education not widely consider for assuring quality of education mainly at national level, this study support the early philosophical argument of (Mark Twian 1835-1910) "I have never let my schooling interfere with my education ".Finally, despite the highly support of this newly vision, the study claims for more scientific researches to validate this philosophical visionary. Such researches may starting by furnishing the ground for quality, philosophy and scientific theories based teaching, learning and curriculum planning and development.

<table>
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<th>Title: The Usefulness of A Course in Non-Verbal Communication for Optimizing the Team Leader Function with Musical Exercises</th>
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| **Presenter:** Ture Larsen  
| **Authors:** Larsen T, Beier-Holgersen, R Ture  
| **Institute:** Slim Nord North Seeland Hospital, North Seeland  
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**Abstract:** The immediate evaluation of the course was very positive and the students reported that they could use the techniques learned. After 1 year the students described how they have focused on the personal feedback and found that focusing on this has made a vast difference in their ability to act non-verbally.

**Background:** It is well known that non-verbal communication carries more than 50% of the communications handled between people.

**Aim:** To investigate the usefulness of musical exercises for the team leader function one year after course completion.

**Method:** With the use of musical exercises medical students were trained the team leader function. The course focused on authority, initial appearance, eye contact, body language and cooperation. The students received personal feedback from an orchestral conductor. The students evaluated immediately after the end of the course and subsequently one year after in order to transfer to the clinic.

**Result:** The immediate evaluation of the course was very positive and the students reported that they could use the techniques learned. After 1 year the students described how they have focused on the personal feedback and found that focusing on this has made a vast difference in their ability to act non-verbally.

**Conclusion:** Because their medical expertise was not at stake the students felt safe, and could devote all attention to leadership. Stressed in the unfamiliar role of being a conductor leading a song all their personal habits and weaknesses initially appeared, thus they could be quickly corrected in the personal feedback in the class. This feedback on a student's non-verbal skills has great transfer to the student's behaviour measured after one year.

**Title:** Comparison of Communication Skill of Medical Students between Activist and Non Activist

**Presenter:** Mahdea Kasyiva  
**Authors:** Mahdea Kasyiva, Warendra Wisnu AR  
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**Abstract:** In globalization era, the advancement of technology information especially in communication already affected current human life and it also becomes a future challenge for medical profession. A doctor must have a good skill in communication to interact with patients and non-patients. A good communication could minimize misunderstanding. Faculty of medicine UII has been teaching students since early semester until before students join clinical program, by this way, students can communicate in good way. Communication skill can be gained not only from academic but also by joining a
student organization. By joining student organizations, students can improve their communication skill and support the program of faculty. The aim of research is to compare communication skill between activist students and non-activist students in faculty of medicine UII.

**Methods:** This research using a simulation of practical communication doctor and patients as observation method. It uses standard patients from outside and secondary data from result of OSCE (Objective Structured Clinical Examination) especially in communication skill of activist students and non-activist students. The subjects of this research are all activist students and non-activist students. The number of activist students equal with non-activist student. The marked components are ability of sense connectivity, completeness of information, sequence of questioning, non-verbal language, eyes contact, and total mark of them.

**Results:** Result of the research will summarized by the difference in communication ability from activist students and non-activist students.

**Conclusions:** There are so many differences between Activist and Non Activist in Communication Skill of Medical Students.

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**Title:** Reflection on Nurse Preceptor Training Courses from the Experiences of Nurse Preceptors and Preceptees

**Presenter:** Yu-Mei Tsai

**Authors:** Yu-Mei Tsai, Jane Lee-Hsieh

**Institute:** Mackay Memorial Hospital, Taiwan

**Email:** miya3372@gmail.com

**Abstract:**

**Background:** In 2012, the Taiwan Joint Commission on Hospital Accreditation established a nurse preceptor training program. However, little research has assessed the nurse preceptor training program from the viewpoints of both nurse preceptors and preceptees.

**Purposes:** This study explores the teaching experiences of nurse preceptors and the learning experiences of new nurses, and reflects on the nurse preceptor training program.

**Methods:** Investigators used qualitative methods to conduct 5 focus group interviews with 15 nurse preceptors and 14 new nurses in a medical center in northern Taiwan. Interview data was analyzed via content analysis.

**Results:** Eight themes are categorized from preceptor teaching experiences and two from preceptee learning experiences. The analysis of the data shows this nurse preceptor training program focused on enhancing teaching skills and assessment skill, while lacking instruction in teaching affection, guidance skills, and emotion management.

**Conclusion/ Implications for Practice:** This study may be used as a reference for developing training courses for nurse preceptors in Taiwan.

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**Title:** Teaching Physiology in an Integrated Curriculum

**Presenter:** Arif Siddiqui

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**Abstract:**

The need for greater integration of subjects in the medical curriculum and even in life sciences is featured consistently in pedagogical literature. Approaching curriculum goals by employing curriculum design and teaching and learning strategies in an integrated manner is meant to achieve the goals more efficiently. Although, the discussion about integration often lead to polarization amongst teachers that argue for it emphatically and those that still insist for dominance of discipline-based teaching while some approach with intermediate steps between the two extremes. The question to be asked to teachers and curriculum planners is not whether they are for or against integration but rather where on the continuum between the two extremes should they place their teaching. Leaving teaching and learning strategies aside the most important fact is the place that discipline of physiology enjoys in an integrated physiology curriculum. Not only in curriculum for undergraduate program in medicine but also basic science curriculum at most life science institutions consist of courses (e.g. general anatomy, physiology, biochemistry, pharmacology etc) learning can be made more contextual and enjoyable by employing an integrated approach rather taught as stand-alone content domains. This review highlights that how truly and deeply place of discipline of physiology is recognized in an integrated curriculum.

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**Title:** Comparison of effectiveness of Resident student tutors and Experienced Faculty to Conduct PBL sessions

**Presenter:** Mahwish Rabia

**Authors:** Mahwish Rabia, Samiya Naeemullah

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**Abstract Book – www.icme2015.org**
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Abstract: Background and Aims: The aim of this study was to examine the effectiveness of using resident students as tutors in a problem-based learning (PBL) medical curriculum. One hundred second-year medical students were divided into ten tutorial groups. The groups were randomly allocated into resident-led tutorials (RLT) (five groups, n=50 students) and faculty-led tutorials (FLT) (five groups, n=50 students). Outcome measurements included assessment of tutoring skills and identifying students’ perceptions about resident tutoring. Resident’s tutors were perceived better in providing comfort and in understanding the difficulties students face in tutorials. Self-assessment of student performance in RLT was not different from FLT. We conclude that the impact of resident tutoring on student performance in tutorials, group dynamics is positive overall. However, Resident tutors require special training before adopting this approach in PBL programs.

Methods: A quantitative study was performed at Islamic International medical college from January 2015 to June 2015 with the approval of the college’s Institutional Review Board. All the medical students of 2nd year were included through convenience sampling and consent was taken to participate in the study. During the research period, eight PBL case scenarios with two sessions each were carried out. Total of 100 students of 2nd year will be divided into 10 groups ranging from groups A to J. Each group will contain 10 students. Resident tutors of different specialties had facilitated half of the groups and faculty had facilitated the other half. Both the tutors were rotated among the groups. At the end of each session of every PBL, students evaluated their tutor’s performance on a closed ended questionnaire having the qualities of good facilitator, categorize according to 5 points Likert’s scale. This study tried to ascertain the differences between resident led PBL and faculty led PBL. The effectiveness was assessed on the basis of timing of the session include the session start on time and ends at the given time, punctuality of facilitators. Keep the group on track extra visage equal participation and no domination. Exploration of different aspect of knowledge on the part of all students, no distraction, and comfort of the students with the facilitator in term of reluctance, preparedness of the facilitator is assessed on the basis of ability to explain the facts. The questionnaire scores will be put into SPSS version 17.The questionnaire scores were analyzed using Independent Samples t-test to determine if there was a significant difference in the scores of students who had an experienced faculty tutor versus a resident tutor. The degree of correlation between students’ scores given to faculty and residents were tested using Pearson product-moment correlation. A p-value < 0.05 was considered statistically significant.

Results: Timing of the session depicts that there is no significant between resident student lead tutorship and faculty led tutorship as the P value in the case is 0.10 which is greater than 0.05. It means that performance of student and faculty has no significant differences in term of their performance in problem based tutorials. Regarding how both the tutors keep the group on tract has P value of 0.12 which is again greater than 0.05, it means both the students and faculty keeps the students on tract equally good. Students feel more comfortable with resident tutors than faculty as P value in this case is 0.04 which is < 0.05. There is no significant difference in providing the feedback to the students because the P value is 0.05 which is same as its normal value.

Conclusions: We conclude that the impact of resident tutoring on student performance in tutorials, group dynamics, time management, provision of comfort and feedback is positive overall. However, Resident tutors require special training before adopting this approach in PBL programs.

Title: Formative Assessment in Medical Education

Presenter: Adem Parlak
Authors: Adem Parlak, Sedat Develi, Baris Sezer
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Abstract: Introduction: Formative assessments happen repeatedly throughout the academic semester. They offer valuable qualitative feedback on medical students' current teaching–learning outcomes, and accordingly aid faculty to adjust prospective teaching methodologies in order to enhance medical students' subsequent learning outcomes. An important aspect of curricular reform is the assurance of quality in all curricular activities, including assessment, with ultimate benefits to the stakeholders medical students and community at large. It is globally accepted that the role of assessment is not simply to assess a medical students residents on preset criteria and make a judgement but also to facilitate his learning through a continuous process of feedback and at
the same time provide him/her the opportunity to improve.

**Discussion:** The concept of feedback in formative assessment has been accepted and embraced across educational institutes to a certain extent, as evidenced by literature. Evidences suggest that quality feedback is not only an essential component but also a central feature of formative assessment. If formative assessment and feedback is well planned and conducted in assessment practice, effective learning can be facilitated in everyday learning activity. Over the past two decades, there has been a shift in the way academic members write about medical students learning in postgraduate education. Instead of characterizing it as a simple acquisition process based on knowledge transmission, learning is now more commonly conceptualized as a process whereby medical students actively construct their own knowledge and skills.

**Conclusion:** Educators and learners are challenged to foster using a reflective skills toolkit with technical skills for reflective professionalism within clinical encounters for competent and compassionate patient-centered health care. Effective implementation of formative assessment as a vehicle for fostering reflective capacity through evaluation/interpretation of clinical experience can help meet this challenge. Formative assessments will eventually have a fruitful influence on students by offering ongoing feedback on their teaching-learning outcomes and suggestions as to how to progress further. Besides, integration of a rewarding bonus system into formative assessments is favourable and yields substantial benefits, such as encouraging a dynamic learning process, relieving stress of summative assessments, and most importantly enhancing the overall course grade.

**Title:** Learning Styles and Learning Approaches: Are they associated with Each Other and Changing during Medical Education?

**Presenter:** Ayse Hilal Bati
**Authors:** Ayse Hilal Bati, Nilufer Demiral Yilmaz, Tahir Yagdi
**Institute:** Ege University, Bornova, İzmir, Turkey
**Email:** nilufer.demiral@gmail.com

**Abstract:**

**Background and Aims:** Nowadays knowledge increases, changes gradually and necessitates to be updated. This requires people to know how to learn and to win their responsibility to learn. Therefore, it is important to recognize learning abilities of individuals and improve themselves. This study aims to determine the learning style and approach of the Ege Medical Faculty students and evaluate the relationship between students’ learning styles and approaches in the training process.

**Methods:** This research was carried out on Ege Medical Faculty students by following them in the 1st, 2nd and 4th years. 154 students fully completing the scales used in the study during in three years formed the research group. Learning styles and approaches of the students are determined using Kolb Learning Style Inventory and Revised Two-Factor Study Process Questionnaire respectively.

**Results:** The number of students having convergent and divergent learning styles increased and those having assimilator style decreased in the years but this change isn’t statistically significant. Over the years the reduction in the deep learning approach scores of students is important, but superficial approach scores doesn’t change. Evaluating the relationship between learning styles and learning approaches, we found that deep learning approach score of students with divergent style was lower than the others in the first two years. However, there was no relationship between learning styles and approaches in the 4th year.

**Conclusions:** Learning styles and approaches occur according to individual preference and may be affected by the learning environments, tasks and testing systems. Follow-up study in three different years at Ege Medical Faculty shows that students have features trying to understand the whole caring the details, focusing on problem solution, moving away from traditional learning. The decrease in deep learning approach of the students may be relevant to their tasks and characteristics of the testing system. The decrease of deep learning approach of students with divergent learning style can be explained by their problem-solving perspective.

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**Title:** The Feedbacks of Meram Medical Faculty about Basic Clinical Skills Education they participated

**Presenter:** Sema Soysal
**Authors:** Sema Soysal, Nazan Karaoğlu, Adnan Karaibrahimoğlu
**Institute:** Necmettin Erbakan University, Meram Medical School, Konya, Turkey
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**Abstract:**
**Background and Aim:** Basic clinical skills training as one of new approaches in medical education are increasing learning with a lot of repetition and not putting patient safety at risk. Meram Medical School continues this training in clinical skills laboratories by the contributions of all academicians since 2004-05 academic years. The feedbacks are taken from medical students for each skill. The aim of this study is to get the feedbacks of trainers contributing to this process.

**Methods:** In a cross-sectional design three open-ended questions via e-mail were asked to the contributing faculty at the end of the 2014-15 academic years. They were reminded two times within two weeks and their responses were subjected to qualitative evaluation.

**Results:** The responses of 12 of 49 faculties were evaluated in total. The first question, which is about the contribution of clinical skills training to education, was pointed out the following items: “this is a practice preparing the student to clinical years and making them to feel as a physician”, “medicine is the composition of science and art, and the art of medicine can be gained by skills training” and “shared experiences become permanent”. For the question about the need for corrections of this process they noted that “lecturers should be motivator and role models”, “updating of guidelines is necessary” and “training should include videos”. The suggestions of the participants were “training the trainers”, “emphasizing that the education is the first job of a faculty” and “regular meetings for trainers during academic year”.

**Conclusions:** For the evaluation and updating of educational curricula taking the feedbacks of both students and lecturers is very important. Although the number of responses was few, by this study the feedbacks and suggestions of the faculty contributing to the basic clinical skills training were gotten.

**Title:** The Feedbacks of Students for Lessons Organized By the Medical Education and Informatics Department in the Tenth Year of Foundation: 2014-2015

**Presenter:** Nazan Karaoğlu
**Authors:** Nazan Karaoğlu, Adnan Karabrahimoğlu, Sema Soysal, Muzaffer Şeker
**Institute:** Necmettin Erbakan University, Meram Medical School, Konya, Turkey
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**Background and Aim:** The Medical Education and Informatics Department (MEID) was founded in 2004-2005 and last year was its tenth year of foundation. MEID is responsible for organizing Basic Medical skills, Communication skills, Radiologic skills education and Problem Based Learning (PBL) sessions with all the faculty of Meram Medical School as tutors and coaches. So, educating the faculty about tutoring, coaching, PBL scenario writing in courses is among the responsibilities of MEID. Academic activities like research are also going on. MEID is getting feedback for all the educational activities it is responsible for and for the last 3 year reporting their results to the administrative units and all the departments of Meram Medical School. The aim of this study is presenting the activity report of MEID in tenth year.

**Methods:** This is a cross sectional, descriptive study. Preclinical medical students in voluntary basis fulfilled the feedback forms which were designed specifically for each educational activity. The feedback form has 10, 9, 8 and 20 items for basic skills, communication skills, radiologic skills education and PBL sessions, respectively. The feedback scores are designed in five point Likert Style beginning with “definitely disagree” to “definitely agree” and total scores may change between 10-50 points for basic skills, 9-45 points for communication skills and 8-40 points for radiologic skills.

**Results:** There were 1345, 1488 and 2354 feedback forms for basic skills and 4075 for PBL. The total mean scores are 43.17±7.13; 41, 86±7.56 and 41.36±7.85 (min:10-max:50) and the total mean PBL scores are 84.72±11.40; 83.45±11.90 and 84.20±11.72 (min:10-max:100) for year one, year two and year three, respectively.

**Conclusions:** This study is a part of curriculum evaluation. In the tenth year of foundation highly feedback scores for MEID is encouraging.
Abstract: Plagiarism is one of the most frequent and serious forms of misconduct in medical education. Plagiarism is "the misappropriation of other's work, words or ideas, claiming to be one's own and giving to perpetuator undeserved benefits". The present study was designed to explore the medical students' attitudes toward plagiarism. The results provide useful information about student-teacher undesirable relationship managing strategies. Minimizing the interactions and maximizing the opponent's displeasure act as negative strategies and restructuring relationships and focusing on self can act as effective strategies.

Title: Exploring Medical Students' Perception towards Plagiarism

Presenter: Zaid Sayedalamin
Authors: Zaid Sayedalamin, Omar Hinawi, Mukhtiar Baig
Institute: King Abdulaziz University, Jeddah, Saudi Arabia
Email: zsaidalamin@stu.kau.edu.sa

Results: A total of 319 students participated in the study, 56.1% were females and 43.9% were males with mean age of 20.77 years. The ATP questionnaire consisted of three parts, which evaluating positive attitude (12 questions), negative attitude (7 questions) and subjective norms (10 questions). Our study participants' score in positive attitude towards plagiarism was moderate (37.52±6.90). The score was also moderate towards negative attitude (19.36±3.46) and towards subjective norms (31.31±5.75).

Conclusions: Students' attitude regarding plagiarism is not up to the mark and there is need to improve their awareness about plagiarism.
students in discussion, writing, and sketching exercises. Building on each others’ observations and thoughts, students exercise their own observation skills and reflect on their own perceptions, biases and the role of emotion in observation. Both before and after the course, students complete the Groningen Reflection Ability Scale (GRAS), Implicit Association Test (IAT), and Tolerance for Ambiguity (TFA) scale; they also asked to reflect, in writing, on what they “see” in selected art and medical images both pre- and post-course. 

**Results:** Both pre- and post-surveys were completed by 23 of 24 participants. The GRAS continues to show significant differences (p<0.05) (pre M = 87.82609, post M = 9052174; pre-variance = 70.24111; post-variance 31.16996; Pearson correlation = 2). Although the TFA scale and the IAT have not shown any significant difference, the TFA remains 1.5 SD higher than the average of all second-year US medical students (as noted by the AAMC Medical Student Questionnaire). Student comments from course evaluations and focus groups have been overwhelmingly positive; students report improved verbal and nonverbal communication skills and increased insight into their own perceptions and the role of context and emotion in the observational process.

**Conclusions:** The visual arts offer a rich resource to enhance students’ observational and other clinical competencies. Our approach is reproducible given its minimal basic resources and faculty training. Limitations include course brevity and the need to find methods to quantitatively measure how the course may impact future clinical thought processes and practice. We are also interested in developing similar visual-arts based courses for physicians and other health-care trainees.

**Title:** Identifying challenges for Effective Evaluation in Nursing Education: A Qualitative Study

**Presenter:** Masoud Khodaveisi
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**Abstract:** Although nursing education in Iran has a positive trend in growth; it is still facing with multifaceted challenges. This study aims to explore the challenges for effective evaluation of nursing education perceived by academic managers.

**Methods:** A qualitative study was performed by using 21 face-to-face, in-depth interviews with academic managers in medical universities and at the Ministry of Health and Medical Education in Iran. All interviews were recorded digitally, transcribed verbatim, and analyzed by qualitative content analysis.

**Results:** The main challenges could be categorized under 3 themes, each included 3 subthemes: managerial issues (inefficacy of management, inadequacy of policies and strategies, ineffective evaluation planning); administrative issues (inefficient and affected evaluators, inappropriate implementation, and inefficacy of approaches and tools); and structural issues (inappropriate culture, clinical education complexity, lack of alumni follow-up system).

**Conclusions:** The results emphasize the need for educational evaluation development in nursing, including systematic and regular educational evaluation planning focusing on efficient feedback system and regard to excellence models. The comprehensive educational evaluation requires participation, involvement, and collaboration among the Nursing Board, Nursing ministerial office, faculties of nursing, and Nursing Organization. Thus, it is necessary to better designate current educational evaluation systems, policies, approaches, methods, and procedures.

**Title:** Evaluation of Organizational Performance of Faculty of Health in Mazandaran University of Medical Sciences to Enable the Establishment of Quality Improvement Based on EFQM Model 1390

**Presenter:** Fatemeh Ahmadinia
**Authors:** Fatemeh Ahmadinia, Fatemeh Oskouie
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**Abstract:**

**Background and Aims:** Regarding the role of Medical universities in health of the society. It is necessary that continuous evaluation mechanism is created with suitable role model in order to increase the quality of medical education considering the requirement in the society. This study was conducted to evaluate Faculty of Health the strengths and areas of Faculty of Health, Mazandaran University Medical Sciences using European Foundation Quality Management
(EFQM) model and examine the gap between current and desired status. **Methods:** This descriptive study was conducted in 2010. Forty four of 51 personnel of the Faculty participated in study (5 managers, 22 faculty member and 17 staff). Data were collected using EFQM standard questionnaire. Data analyzed by descriptive statistics. **Results:** It is indicated that total score of the organization was 148.07 from 1000. The results of Z-test show that there is a significant between the present condition and the desired situation and in general (P< 0.001). Between 9 criteria that were analyzed the biggest gap was in customer results (16.53) and the least gap was in the society results (17.32). **Conclusions:** The findings can be used for managerial decisions. Planning continuing evolution of organization is needed. It is necessary to consider customer results in order to create a favorable environment.

**Title:** How Professionalism is respected in the Workplace according to Clinical Teachers’ Point of View? A Situation Analysis in TUMS

**Presenter:** Hooman Hossein Nejad

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**Abstract:**

**Background and Aims:** Professionalism is a critical quality for physicians to possess and the basis of medicine’s contract with society. This study was performed to evaluate how professionalism is respected in clinical setting according to clinical teachers’ point of view in Tehran University of Medical Sciences (TUMS). **Methods:** A 65- item questionnaire in 6 domain of professionalism developed based on professionalism official guideline which is published in TUMS. Domains are consisting of altruism, responsibility, justice, honor/integrity, excellence and respect each of them have several items. Validity and reliability of the questionnaire was done by researcher with Cronbach’s alpha = 0.84. In this descriptive and cross sectional study, 45 faculties from different clinical disciplines completed the questionnaire. They evaluated their clinical workplace in all domains on a five-point Likert from very desirable to very undesirable. Data analysis was conducted by SPSS16. **Results:** The results show that respect to professionalism in their clinical setting is desirable in a way that scores was 67 of 100 in general. The highest and lowest score were in honor/integrity and excellence domains respectively. Wellbeing as an item in excellence domain is scored undesirable according to this assessment. **Conclusions:** The result of our work reveals that respect to professionalism in our clinical setting is acceptable. Though it seems improving some items of domains especially well being of staffs is needed. Increasing work hours, different and multiple aspects of responsibilities can affect balanced and appropriate lifestyle.

**Title:** Applying De Bono’s Six Hat Strategy to Facilitate Student Learning in Small Groups

**Presenter:** Muhammad Iqbal

**Authors:** Muhammad Iqbal, Ali Tayyab, Ayisha Moniyuddin, Arshad Javed

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**Abstract:**

**Background and Aims:** Shifa College of Medicine follows an integrated medical curriculum with small group learning as a major instructional strategy. While this methodology has its merits, the discussion in small groups, more specifically the cognitive processes, can easily become non-directional ultimately concluding without achieving its objectives; hence the group’s thinking becomes ‘unruly’.

**Methods:** An approach to problem solving by utilizing De Bono’s Six Hat Thinking Strategy was introduced to the small group facilitators. Each color hat was assigned as a metaphor for a specific cognitive process. The facilitators were asked to put on a hat that identified with the direction of their thinking process, during the small group discussion providing direction to the cognitive process. The small groups were initiated and concluded with the ‘blue’; meta-cognition hat, while all discussions started with all participants wearing the ‘white’; the information hat.

**Results:** Feedback from the sessions showed that the faculty found this strategy to be effective in achieving the objectives, giving them a clearer idea of how to facilitate and guide students’ learning in small groups.

**Conclusions:** The Six Hats strategy is effective for enhancing small group learning. Six Hats strategy should be used in small groups to improve its effectiveness in achieving its objectives.
Title: Design and Implementation of a Computer Assisted Integral System for Medical Residents’ Assessment at UNAM’s Faculty of Medicine Division of Postgraduate Studies

Presenter: Durante MI
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Abstract:
Background: One important component of residents’ assessment at UNAM’s Faculty of Medicine is a written exam. In 2009, the Evaluation Department of the Division of Postgraduate Studies assessed 8,000 residents enrolled in its 74 specialties. Exams included a printed version as well as computer assisted when images were required. That year, the Evaluation Department applied 126 written and 28 computer assisted exams for residents enrolled at UNAM. The Division of Postgraduate Studies consumed resources for printing 10,000 exams and same number of score sheets with a total of 610,000 copies; man-hours for this responsibility, pre and post exam security and supervised destruction of applied exams; human and technical resources for optic reader process and considerable time to obtain final results. To address this situation, great consideration was given to the astounding 30% annual growth rate of information and telecommunication technologies (TIC). The last report by the International Union of Telecommunication refers this data to the use of computers and Internet as information processing tools in education.

Objective: Develop a computer assisted integral system for medical residents’ assessment at UNAM’s Faculty of Medicine Division of Postgraduate Studies, that also offers data consistency, confidentiality and security in a timely manner.

Method: In this context, the Evaluation Department introduced the project “SIIE” (SIIE: Sistema Integral Informático de Evaluación asistida por computadora) in order to design and implement a computer assisted integral system for UNAM medical residents’ assessment nationwide. SIIE, from the standpoint of information technology, incorporates and integrates systems development and uses databases, wireless and local networks and informatics security. It applies the existing academic criteria, norms and procedures used in traditional printed exams. In accordance with this, a specific academic committee of seasoned faculty members from different clinical institutions is responsible for the exam elaboration process for each academic program.

Exams are applied according to the academic program for each specialty and the corresponding curricular year. Faculty of Medicine has three floors in UNAM’s Tlatelolco University Tower in Mexico City specially designed for simultaneous computer assisted evaluation of 456 residents. The area is equipped with state of the art computer and telecommunications technology that guarantees informatics security and confidentiality. The infrastructure offers video monitoring of each exam, individual examination, optic reader registration and access control, and immediate printed results for each resident once the exam is over. Exam information security is done by intranet, validating IP access linked to resident’s ID account number. The system controls each and every computer and registers each system access according to security requirements and good practices referred in ISO/IEC 27001.

Each resident maps exam questions by colors facilitating follow-up of answered questions in green, unanswered in red an amber for questions with doubt. The proposed academic evaluation offers detailed analyses and useful feedback on strengths and weaknesses for residents, faculty, clinical sites and institutions, and each academic program of UNAM’s PUEM (PUEM: Plan Único de las Especializaciones Médicas) medical specialization program. This allows for all involved to make decisions and implement future actions based on solid evidence. Once the resident finishes, the system analyzes answers and provides personalized results including percentage and distribution of right answers, score per academic unit and if the final result is a fail score, the resident is informed of the date and hour for the next exam. The final process is result analysis and statistics for each clinical site, specialty and academic year. This includes thematic unit scores, score averages, right answer distribution and results by hierarchy, personalized results per resident per site, statistical analysis and levels of difficulty. The system provides item analysis for each question, thus informing experts on indexes of difficulty, discrimination, correlation and percentage of right answers to calibrate the instrument.

Results: The use of information technologies for evaluation purposes at UNAM constitutes a differentiating element with respect to written exams and use all resources efficiently. In February 2015 11,005 residents were evaluated in...
12 days using this system. Three hours were allotted for the application of each of the 205 exams applied for the 74 specialties. There were up to 26 different exams applied simultaneously with 450 residents per application with a total of 33,015 computer hours. Each exam had 300 questions divided into 60 clinical cases that included images and videos. SIIE facilitated the elaboration, application, scoring and statistical analysis processes of evaluation within each medical specialty training program. It also reduced the cost and total time invested in the process. All versions of results and statistics are rendered promptly for all those involved in decision-making and definition of future actions. The system meets Faculty of Medicine’s Evaluation Committee’s criteria for determining the validity and reliability of evaluation instruments and its technical reports. SIIE meets the needs for which it was designed, implements all security measures necessary and has various advantages over the traditional method.

**Material and Method:** The PBL strategy was chosen based on the ADDIE model (Analysis, Design, Development, Implementation and Evaluation) and the constructivist learning model for competencies, which both favor the development of clinical reasoning and other thinking abilities. Subsequent practice in standardized healthcare simulation scenarios followed. General rules and principles were applied in patient healthcare clinical situations with increasing complexity aimed at problem identification and stipulation, diagnostic hypothesis generation, application of previous knowledge and search for new knowledge aimed at solving the formulated hypotheses or diagnoses. The most prevalent diseases in our country were chosen for the design of PBL and simulation cases and scenarios. Among the DICIM’s resources is the Center for Training and Certification of Medical Aptitudes (Centro de Enseñanza y Certificación de Aptitudes Médicas -CECAM) which is available to the 4,000 plus medical students. This simulation center has six areas and more than 300 simulators for academic program based practices. It also has 12 rooms for small groups with a maximum capacity of 15 students. Its faculty includes 146 teaching professors and 16 CECAM instructors.

**Results:** All 4,000 students received training in this work scheme. Practices were held as planned without setbacks and specific instruments were used to assess more than 80% of the students.

**Conclusions:** A review of the literature does not render any reports of previous experiences working PBL and simulation with a large student population. Student satisfaction during practices was very motivating for the teachers who guided them. The opportunity to integrate theory and practice will give a higher significance to basic sciences and this will rebound in a better clinical performance. The results obtained from student evaluation will be reported in the near future.

**Title:** "Mini Phantom Pelvis: An Innovation from Students to Students"

**Presenter:** Ayu I.L., Ummi K.N.
**Authors:** Ayu IL, Ummi KN, Noor RI, Rani NA, Iffah H
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**Abstract:**

**Background and Aims:** Medical Students often related with the laboratory equipment and anatomical books which are relatively expensive. Therefore, they can only learn by accessing facilities on campus. Medical and midwifery students are required to know the anatomy of the human body, especially pelvic anatomy. Pelvis is very important to be studied as a major focus of a midwife or Obstetrics and Gynecology specialist.
In order to overcome these problems, an alternative or innovative equipment that appropriate to the needs of students is needed.

**Methods:** We began observation by collecting information from students about the needs for special equipment. We found that medical students mostly think that accessing the equipment is a problem and they need a convenient equipment. Then, we conducted a survey about which material that appropriate to the needs of students but with affordable price and compact to be brought anywhere by them.

**Results:** According to the research results, the mini phantom pelvis (MITHOMPEL) turned out as a solution to solve the problems for medical students. It is a handmade product and environmental friendly because made from the waste of the wood that can still be processed. It is also available in affordable price and light heavy so that can be brought anywhere. It will also help the students to improve their understanding of pelvic anatomy because its structure is similar with real pelvic, indeed, it helps them to comprehend with labor mechanism better.

**Conclusions:** MITHOMPEL as an effective solution to help medical students learn.

**Title:** Designing and Developing an Undergraduate Medicine Curriculum for the Future

**Presenter:** Christiane Mueck

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**Abstract:**

**Background and Aims:** Undergraduate medicine curriculum design and development should be guided by research, evidence, innovation, and the needs of society. The aim of our study is to describe the design and development of new undergraduate medicine curriculum incorporating these elements.

**Methods:** Case report of the design and development of a new medical curriculum for physicians practicing beyond 2025.

**Results:** In October 2014, Qatar University announced the establishment of a College of Medicine (CMED) which is the first national medical school. Beginning in Fall 2015, CMED will offer a six-year undergraduate medical program. The curriculum will incorporate diverse pedagogical approaches supported by advanced ICT that foster students' active learning and critical thinking skills. Early clinical experience, student-tailored elective studies, and research possibilities are key elements in a curriculum that combines vertical, subject-oriented learning with horizontal themes. Building on existing and emerging health- and science-related programs in Qatar, the curriculum will provide possibilities for interprofessional learning and multiple student pathways. The outcome competencies have been reviewed by a wide range of stakeholders through a verification study. The assessment system will balance between formative and summative methods. CMED is committed to developing a continuous quality assurance and enhancement system. This will be based on continuously measuring performance, synthesis of data, accumulating evidence, and a constant update of the program by “closing the loop” when implementing feedback from assessment and benchmarking performance against best international practices.

**Conclusions:** Our case report contributes to the sparse existing literature on describing the design and development approach for a modern undergraduate medicine curriculum.
Free Papers: Poster Presentations

Title: Measuring Perceived Sources of Stress among Pharmacy Students in Malaysia

Presenter: Syed Imran Ahmed
Authors: Syed Imran Ahmed, Syed Shahzad Hasan, Saw Hwei Whei, Muneer Gohar Babar, Wong Pei Se, Mirza Rafiullah Baig, Syed Wasif Gillani
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Abstract:
There is a growing concern towards the occurrence of stress among undergraduate pharmacy students. The objectives of this study were to identify the perceived sources and factors which may be contributing to stress among pharmacy students during their candidature. A modified version of Dental Environment Stress (DES) questionnaire was used for this cross-sectional study conducted among 470 randomly sampled pharmacy students from two private and two public universities in Malaysia. Statistical analysis were carried out using SPSS® version 16. Based on the findings, Female (mean = 4.02), Malay (mean = 4.20), fourth year (mean = 4.11) and public university (mean = 4.04) students were the most stressed group of students in this study. Five most common stressors were found associated with academic performance, where examinations and grades (overall mean = 5.11) was the highly ranked stressor. Male students experienced higher stress level related to fear of unemployment after graduation (3.43 vs 3.08), financial resources (4.16 vs 3.70) and fear of facing parents after failure (4.29 vs 4.27) than female students. Private university students experienced higher stress level than public university students for financial resources (3.61 vs 4.05, p=0.011) and fear of facing parents after failure (4.11 vs 4.47, p=0.029). Academic performance related issues were found as the top stressor, indicates further exploration and necessary interventions to alleviate the needless stress in order to improve overall wellbeing of students without compromising on overall program output.

Title: Anchoring Knowledge in Biochemistry through Active Learning Strategies Aimed at Recall, Correlation and Integration

Presenter: Maya Roche
Authors: Maya Roche, Akshatha G. Nayak
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Abstract:
Background: The BDS programme of Melaka Manipal Medical College (MMMC) delivers the biochemistry curriculum in four blocks. After completing 2 blocks, students go on vacation for a month. When they get back to academics, they are unable to recall prior knowledge, correlate and integrate it with topics being taught in the current block. Active learning strategies are known to enhance deep learning, preventing dissipation of knowledge, thus increasing retention. They can be incorporated into small group teaching. The present study used active learning strategies to mitigate the problems related to loss of knowledge among students.

Aim: To stimulate recall of prior knowledge, to integrate and apply it.

Methods: BDS students of year 1(n=79), took part in four active learning strategies which were attempted in the increasing order of difficulty. The activities were -matching concepts, naming the enzyme and reaction catalyzed, filling up the blanks in a narrative on glucose metabolism and concept mapping. Following this, a questionnaire, consisting of 20 items was administered to the students, to which they responded on a five point Likert scale. After frequency analysis of the responses, results were presented as percentage. Results Students were unanimous in their opinion that, the activities had made their knowledge well integrated and cross-linked (100%). They were motivated to revise (82%) and recall prior topics (92%) from important areas of the curriculum (92%). They were strongly positive that they would be able to achieve higher grades in their final examinations (80%).

Conclusion: The students were able to appreciate the advantages and benefits of the different activities in which they participated. The study completely achieved its objectives and gave students and faculty a sense of fulfillment in the twin processes of teaching and learning.
**Title: Communication Skills Training Program for Dental Undergraduate Students in Oral Surgery Clinics**

**Presenter:** Meenaxi Umarani  
**Author:** Meenaxi Umarani  
**Institute:** KLE VK Institute of Dental Sciences, KLE University, Belgaum, India  
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**Abstract:**
Communication skills (CS) are crucial for establishing good patient-dentist interpersonal relationship and successful dental practice. Effective CS is known to reduce dental anxiety, improve patient’s acceptance and co-operation during treatment, better satisfaction and less malpractice claims. Despite the widespread recognition of the importance of the communication skills, dental undergraduate curriculum in India does not formally train the students in CS. At present in our setting, the students acquire these skills by observing their faculty, senior students and peers. Due to inadequate training, the students find it difficult to record thorough case history and convince the patients for dental procedures especially extraction of teeth. The patients remain anxious during treatment which may lead to undesirable consequences. There is a need to introduce communication skills training program in the dental curriculum and should be an important component of undergraduate training. This study describes a communication skills training program for third year dental students in oral surgery clinics. A batch of twelve third year dental students posted in Oral Surgery clinic was randomly included in the study. Baseline data was collected by testing the students existing communication skills using Dental Consultation Communication Checklist (DCCC) on patients. Further these students were divided in small groups and received formal training in communication skills through interactive discussions, simulated and real clinical scenarios. Following training all students practiced the skills on simulated and while working with real patients with equal opportunity. The students were again assessed for communication skills on real patients, using DCCC at the end of one month clinical posting. The difference in the communication skills before and after the training was analyzed using paired t test and wilcoxon matched pairs test. The students rated the CS training program highly. They were able to communicate more effectively with the patients and seemed more confident. Comparison of pre and posttest with skill scores towards Dental Consultation Communication Checklist by paired t test showed significant difference statistically. The mean difference was -33.30 and p-value was 0.00001 (p<0.05) Communication skills are pre-requisite for successful dental practice and should be included as an integral part of dental curriculum. Dental students need to be trained in CS systematically using appropriate teaching methods.

**Title: Effect of Education on Menstrual Knowledge among Saudi Adolescent School Girls**

**Presenter:** Sara Al Eraij  
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**Abstract:**
This study is designed to identify the effect of education on adolescent school girls’ knowledge about menstruation, and to assess the hygienic behavior and indigenous practices among the study population during menstruation. A quasi-experimental study was conducted to assess the impact of a menstrual education program on adolescent girls’ knowledge about menstruation. A total of 232 students in a randomly selected intermediate and high schools in the eastern region of Riyadh City were included. A self-administered questionnaire was distributed before and after the menstrual education program to obtain the required information from the study population. The results showed a significant difference in the mean score of knowledge before the menstrual education program and the mean score of knowledge after the menstrual education program among Saudi adolescent school girls (before:2.81±1.07, after:5.16±1.12, P <0.001). The high school girls’ mean knowledge score was significantly higher than the mean knowledge score of the intermediate school girls before and after the menstrual education program (P= 0.016 and P= 0.013 respectively). The present study confirms that menstrual education programs can be an effective method in improving the adolescent girls’ knowledge about menstruation and promoting their menstrual health.
**Title: Mini-CEX as a Practical Tool for Assessing Dental Post Graduate Students - A Review**

**Presenter:** Sheetal Sanikop  
**Author:** Sheetal Sanikop  
**Institute:** Maratha Mandal's NGH Institute of Dental Sciences and Research Centre, India  
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**Abstract:**

Presently clinical examinations in dentistry for post graduates assessment involves recording case history of a given case and discussion with examiners. This assessment is a conventional method which is subjective and is unstructured. In a mini CEX there is an evaluator who observes the student conducting focused interview, physical examination or therapeutic instructions in the clinics, which is followed by immediate feedback and completion of rating form. As there is feedback to the student and a rater form it serves as a better assessment tool and thus ensures professional development. In a mini CEX there is an evaluator who observes the student conducting focused interview, physical examination or therapeutic instructions in the clinics, which is followed by immediate feedback and completion of rating form. Studies have shown that mini CEX is a valid and reliable method to assess the clinical competencies of a student. Workshops on mini CEX can be conducted as a faculty development programme before implementing the method. Various studies have demonstrated that there is improvement in cognitive knowledge and impact on the practice behavior of the faculty who attended the workshop. The data generated from these studies can be used to redesign curriculum from conventional case history recording to mini CEX method. As this is a review poster the authors intend to do develop a Mini CEX for the dental post graduates, apply it as a formative assessment tool and also evaluate its effectiveness.

**Title: Effect of Non-Academic Variables (Gender and previous system of education, HSCE/GCE) on Medical Students Score**

**Presenter:** Saba Tariq  
**Authors:** Saba Tariq, Sundas Tariq, Mukhtiar Baig  
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**Abstract:**

The present study was designed to explore the effect of non-academic variables (gender and previous system of education, HSCE/GCE) on academic performance of medical students. This analytical study was carried out at the Department of Biochemistry, Bahria University Medical and Dental College, Karachi, in the year of 2011, with 97 students of second year MBBS. We gender-wise compared the scores obtained in module I and module VI and also compared students scores according to the educational background (general certificate examination (GCE) vs higher secondary certificate examination (HSCE) system) Data was analyzed on SPSS 16. Girls’ students’ obtained significantly higher marks in first and sixth module exams in SEQs, OSPE, and in overall score, as compared to boys. Girls’ students’ also obtained higher marks in VIVA in both modules but it was significant in sixth module only. The students of GCE background obtained significantly higher marks in SEQs, VIVA, total marks in practical and overall score in sixth module as compared to HSCE system while no significant difference observed in first module. GCE (A-level) students’ pass percentage was significantly higher than the HSCE students in module I in MCQs, total theory marks, VIVA, total practical marks and in overall score. In module VI exam GCE (A-level) students’ pass percentage in OSPE and total practical marks was significantly higher than HSCE students’ while no significant difference was observed in other assessment tools. Our results show that girls’ students’ and students having GCE background performed well in different component of the assessment tools.

**Title: Education of Hypothyroidism in Pregnancy Using e-Learning Triple Jump Technique**

**Presenter:** Ideh Dadgaran  
**Authors:** Ideh Dadgaran, Hoorieh Shaigan, Behrooz Golchai, Nafiseh  
**Institute:** Medical Education Research Center, Guilan University of Medical Sciences, Iran  
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**Abstract:**

Hypothyroidism and clinical decisions of mothers suffering from it is one of the most important topics in the medical sciences and one of the most common problems in pregnancy in which can lead to irreversible fetal complications. Efforts of all the teachers are mainly to enhance clinical reasoning and promotion student decisions. To
achieve this purpose, the present study has been done as a training of hypothyroidism in pregnancy with the use of e-learning triple jump technique. A systematic instructional design pattern ADDIE (systems analysis, design, development, implementation, evaluation) was performed. This study was conducted on 72 midwifery students in 5th semester. During the 3 years since 2012. At first, a needs assessment was performed on students. Then, the educational hypothyroidism software was designed on the basis of the triple jump method was given to them. In the first jump, several questions about Hypothyroidism and its complications in pregnancy were displayed by the software. In the second jump, the students were given an hour to use the resources available in the software, find the answer to the problem posed. In the third jump, the correct answers to the question rose in the application and were given feedback on the students’ queries and responses. The mean age of the participants were 20.76 ± 1.12 years. According to our assessment, the majority of students (81.3%) said that their teaching methods commonly were not enough used to boost the power of their clinical judgments and on the other hand, they mentioned to not enough time in the class to teach problem solving methods. Our findings showed that 53.71 % of students, had known this teaching method as an effective technique to strengthen the power of their clinical judgments in the diagnosis and treatment of diseases and 69.8% of them were completely satisfied of this teaching method. Based on our findings, it can be concluded that due to the teaching time limitations and a large amount of educational content, this method can be an effective teaching technique for medical students training.

**Title:** Prepcheck Supported Objective Assessment of Student's Skills in A Preclinical Simulation Mulation Envirnoment

**Presenter:** Michael Wolgin  
**Authors:** Michael Wolgin, Ahmed El Shafie, Ina Wilrich, Wilhelm Frank, Andrej Michael Kielbassa  
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**Abstract:**  
The assessment of practical skills during preclinical dental education often lacks objectivity. The present study aimed to develop a computer-supported assessment concept for practical tests, with particular focus on the possible assessor-dependent differences in setting tolerance limits for positive assessments. A sample of 54 third-year dental students participated in phantom-lab course examinations. The standardized exams consisted of five test-stations, such as preparation of several cavities and insertion of different fillings using standard typodonts. One of the tasks was to prepare a class-II cavity aiming at filling the cavity with amalgam. Three calibrated assessors agreed on a series of criteria to evaluate the performance of the students and independently scored the performance by means of visual assessment. Additionally, CEREC Omnicam optical impressions were taken to digitize the samples, followed by assessing the cavities using the prepCheck application. For this procedure, the predefined assessment criteria had been reapplied. Statistical analysis of the digitized samples revealed a significant difference between the actual-ly achieved cavity dimensions compared to the predefined values of the “master preparation” (p=0.0001; t-test). The tutor-dependent tolerance limits for these values, achieved by visual as-sessment, ranged up to 34%, thus indicating a high deviation from the primary educational objectives. The assessment of practical skills in an objective manner still seems challenging. Increased consideration should be given to using computer-aided assessment procedures.
Title: Level of Perception and Social Interaction Anxiety of Adolescents who Stammer Before and After the Speech-Language Therapy

Presenter: Anam Nawaz
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Abstract:
Stammering is described as pauses, prolongations, and blocks in the speech. Some theorists described that individuals who stutter are psychologically different to those who do not stutter. A person who stammers usually becomes anxious in social situations, and fears speaking in front of others which in turn affect their perception towards speech.

The purpose of this study was to determine and evaluate the effects of speech therapy on the level of stammering severity, perception towards speech and the social interaction anxiety of adolescents who stammer.

It was an interventional research in which purposive sampling technique was used for the purpose of data collection. Sample size was consisted of 27 adolescents who stammer of both genders in the age range of 12–19 years residing in Rawalpindi and Islamabad. The participants received total of 48 sessions of speech therapy. Each participant had two sessions per week and each session was of 45 minutes of duration. Stammering level of participants was from moderate to severe without any comorbidity of any other condition. Perception of stuttering inventory – PSI and social interaction anxiety scale – SIAS along with the fluency severity rating scale were used before and after the speech therapy. Responses of the participants were documented on PSI, SIAS and fluency severity rating scale. Data was collected before starting the speech therapy sessions and also after the speech therapy sessions. The results revealed that the mean score of perception before speech therapy was 43.03 while after therapy were 29.44 and the mean score of social interaction anxiety before speech therapy was 55.48 and after therapy were 41.96. Results also indicated a significant difference between the level of perception (p ≤ .05) and social interaction anxiety (p ≤ .05) before and after the speech therapy of adolescents who stammer. It was concluded that there was a significant difference and change in the level of perception and social interaction anxiety among adolescents who stammer before and after their speech therapy.

Title: Prevalence and risk factors of low back pain (LBP) among the office workers of Tehran University of Medical Sciences, Tehran-Iran & King Edward Medical University, Lahore-Pakistan

Presenter: Syed Asadullah Arslan
Authors: Syed Asadullah Arslan, MR Hadian, Golamreza Olyaee, Hussain Bagheri, Mir Saeed Yekaninejad
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Abstract:
Background and Aims: Low back pain is an important public health, social and economic problem at present. It is a disorder with much conceivable etiology, occurring in different groups, and is also a common health condition in working population. Office workers share several behavioral patterns: they work in a sitting position without moving for long periods of time; they only use a few specific muscles of their arms, wrists and hands; and they tend to adopt poor body posture. These working patterns generate musculoskeletal disorders and can lead to discomfort or pain which can have an impact on quality of life. Present study was done to find the
prevalence and risk factors of low back pain (LBP) among the office workers of Tehran University of Medical Sciences, Tehran- Iran & King Edward Medical University, Lahore, Pakistan.

**Methods:** A self-reported standardized questionnaire was constructed to record risk factors associated with the occurrence of LBP. For this cross section study, 400 office workers from TUM and 250 from KEMU aged between 18-60 with at least 1 year work experience filled the questionnaires. Personal characteristics, work ergonomics, and psychosocial traits were collected and related to LBP prevalence.

**Results:** Of the 500 office workers from Tehran University of Medical Sciences, Tehran-Iran, 400 responded (80% return rate) and of the 300 office workers from King Edward Medical University, Lahore –Pakistan was 29.20% and 69.20% respectively. Point & life time prevalence of LBP among office workers of King Edward Medical University, Lahore-Pakistan was 32.30% and 74.50% respectively. Results showed that Prevalence of low back pain increased with increase in age, work experience, low education, decrease in physical activity, sleep disturbance, smoking habit, more sitting and standing time, computer use and with low job satisfaction.

**Conclusions:** Because of high prevalence of low back pain (LBP) among office workers of these two universities, better ergonomic facilities, awareness about sitting posture, regular exercise, good sleep and psychological support to the workers were recommended to decrease the effects of predisposing risk factors of low back pain.

**Title: Assessment of Student Perceptions of Respiratory Care Program using the University of Dammam Respiratory Care Educational Environment Measure (UDREEM)**

**Presenter:** Maali Alqahtani

**Authors:** Maali Alqahtani, Ghazi Alotabi

**Institute:** University of Dammam, Saudi Arabia

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**Abstract:**

One of the most important aspects of medical education that has gained special attention is the educational environment or climate of the academic program. Educational climate is a manifestation of educational environment and curriculum which influences student behavior, achievement, satisfaction and success. The aim of this study was to evaluate the educational environment of Respiratory Care program in the University of Dammam by using the University of Dammam Respiratory Care Educational Environment Measure (UDREEM). A cross-sectional survey was conducted at the Department of Respiratory Care, College of Applied Medical Sciences, in the University of Dammam. Participants were RC male and female students in 2nd, 3rd, and 4th years. A self-administered UDREEM questionnaire Arabic version was used which composed of 71 items (In five domains), based on a 5 point Likert scale. A total of 133 participants out of 137 filled the questionnaire with a response rate of 97%. The Cronbach alpha coefficient for all items was 0.94. The mean UDREEM score was 195.5 out of 284 (69%). The strongest area in the department was the ‘perception of RC profession’ which was (77%), while the weak area was the perception of ‘program management’ which was (61%). There was no significant difference between male and female students in the overall UDREEM score (p=0.66). There was a significant difference between the ‘second and third year’ students (p-value=0.04) and the ‘second and fourth year’ students ( p-value=0.001) .The second year students gave a higher score than the third and fourth which was 210 out of 284, while there was no significant difference between the third and fourth year students (p =0.35). Our study showed that UDREEM mean score reflected a more positive than negative environment in the RC Department in the University of Dammam and it was the highest compared to local universities and almost similar to other academic institutes in Europe.

**Title: Do Students of Vocational School of Health Sciences Ready for Interprofessional Education in Turkey?**

**Presenter:** N. Demiral Yilmaz

**Authors:** F. I. Tengiz, E. Ergonul Kulac, N. Demiral Yilmaz, S. Oncu, E. Kalyoncu, A. Akkokcul, I. Semin

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**Abstract:**

**Background and Aims:** Interprofessional Education (IPE); defines together learning of the students from two or more professions from health or social care areas with the aim of having
Title: Effectiveness of the use of hearing aid vs cochlear implant for children with profound deafness

Presenter: Faiza Jabeen
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Abstract: The research problem of the study is to explore the effectiveness of the use of hearing aid for children with profound deafness. Different companies claim that their specific hearing aids give appropriate results in terms of listening and also developing speech in children diagnosed with profound deafness. The current study was conducted to ascertain the effectiveness of new intervention in Pakistan like cochlear implant for profoundly deaf children in comparison to hearing aids.

Objective: To obtain evidence through comparison of cochlear implant and hearing aid users' treatment results and establishes the most useful medium for auditory, speech and language development for children with profound hearing impairment.

Methodology: The study was comparative analytical. Protocol included selection of 40 children with sensory neural profound deafness, 20 with the hearing aid and 20 with cochlear implant. All the children were taking speech therapy for minimum six month. Data was collected by conducting interview of parents of these 40 children using the Meaningful Auditory Integration Scale (MAIS) and the Meaningful Use of Speech Scale (MUSS). Each parent was interviewed in individual session of 45 minutes.

Results: The higher MAIS scores were significantly associated with higher MUSS scores suggesting that children fitted with cochlear implant has better functional hearing and were also better in using spontaneous speech to communicate as compare to the hearing aid user group.

Conclusion: According to the parental report children with cochlear implant displayed better results in terms of development of speech and language in comparison with children using hearing aids. Cochlear implant is a better recommendation for children with profound deafness.

Keywords: Profound Hearing Impairment, Hearing Aid, Cochlear Implant, MAIS, MUSS.

Title: Social Media and Healthcare Education: The Students’ Views and Levels of Usage

Presenter: Kaan Yucel
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Abstract: Smart phones with the popular social media (SM) applications installed have become almost parts of the bodies of our students. In this study, we aimed to collect data on the levels and ways of usage of SM by different groups of healthcare students for educational purposes. The
survey was prepared by Google Docs and was responded by 303 healthcare students with a response rate of 90%. We used five points Likert Scale. 303 healthcare students (82 first year medical students, 61 second year medical students, 58 first year pharmacy students, and 102 first year nursing and second year dietitian students) answered to our survey. Following daily topics in the news was the most popular reason for using SM (n=235, 78%). Overall, “educational purpose” was picked as a reason by 47% of the students. “SM applications should be used in healthcare education” statement was agreed by 82% of the students. The students were asked how they were using SM for educational purposes. The majority answered as checking pages like Wikipedia (n=247, 81, 5%). This was the number one reason for each class. 43 students (14%) said they were not using SM for studying. When the frequencies of students’ use of SM tools for education were asked, WhatsApp stood as the most popular tool. The second most popular was Wikipedia. On an open-ended question, most students said they would use WhatsApp if they were instructors. SM is not only for fun but also for education. WhatsApp is by far the most popular instant messaging application for smartphones. Here we present how WhatsApp has been used in Anatomy education as well as students’ level of use of WhatsApp in general and for educational purposes, as well as their feedback on the use of WhatsApp in anatomy education. WhatsApp class group has been used in many ways: 1) Sharing info, 2) Answering questions, 3) Short lectures, 4) Getting feedback, 5) Highlights during the lecture. In order to see the opinions of our students on WhatsApp groups, we conducted a survey with 302 healthcare students. 302 students from four different classes (82 first year medical students, 60 second year medical students, 58 first year pharmacy students, and 102 first year nursing and second year dietitian students) answered to our survey. WhatsApp was the most popular social media tool among the 15 tools questioned. 54% students use WhatsApp often or very often for educational purposes. The majority (43%) spend 1-2 hours daily on WhatsApp for their academic work. We gathered feedback on the WhatsApp groups from each class. WhatsApp group was used frequently or very frequently by the majority of the students (n=183, 61%). There were, however, sharp differences among the classes. Quickness and ease in reaching information were defined as the main advantages. High number of messages and irrelevant messages were considered as disadvantages by the students. As WhatsApp group has many advantages, it seems impossible to ignore it due to its problems. We are planning to work on the drawbacks and come with solutions.

Title: WhatsApp Anatomy: Using WhatsApp in Anatomy Education

Presenter: Kaan Yucel
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Abstract: WhatsApp is by far the most popular instant messaging application for smartphones. Here we present how WhatsApp has been used in Anatomy education as well as students’ level of use of WhatsApp in general and for educational purposes, as well as their feedback on the use of WhatsApp in anatomy education. WhatsApp class group has been used in many ways: 1) Sharing info, 2) Answering questions, 3) Short lectures, 4) Getting feedback, 5) Highlights during the lecture. In order to see the opinions of our students on WhatsApp groups, we conducted a survey with 302 healthcare students. 302 students from four different classes (82 first year medical students, 60 second year medical students, 58 first year pharmacy students, and

Title: Rethinking Problem Based Learning with Perspectives of Students of Meram Medical College

Presenter: Nazan Karaoglu
Authors: Nazan Karaoglu, Adnan Karaibrahimoglu
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Abstract:

Background and Aim: Concerns about raising qualified physicians to meet the changing demands of the new century resulted in reforms in medical education. In student centered models like Problem Based Learning (PBL) students encouraged to learn actively by solving problems depending on their prior experiences according to adult learning theories. Teachers also forced to be more aware of new techniques and theories for tutoring in PBL sessions. Combining traditional approaches and PBL, was noted to be the most effective training for undergraduate medical students. This hybrid curricula understanding is the basis of Meram Faculty of Medicine. We aimed to determine the attitude of medical students towards PBL sessions for curriculum evaluation.

Methods: In a cross sectional, descriptive design, preclinical medical students in voluntary basis fulfilled the questionnaire form which has demographic questions, open ended items and PBL Attitude Scale (PBLAS). Via SPSS version 13.0. Categorical, continuous variables were
determined and p values <0.05 accepted as statistically significant.

**Results:** We analyzed 427 questionnaires representing 55.5% of the students in preclinical years. Forty two percent were male (n=178) and 47.8% were first year students (n=204). The Cronbachs’ alpha of the PBLAS was 0.92. The mean PBLAS score was 74.64 ± 14.96 points (min=26; max=92) and PBLAS score of third years were significantly lower than first years (p=0.014). Female students had more positive attitudes than males (p=0.008). The increase in PBLAS score was in positive correlation with the satisfaction from PBL scenarios (r=0.275; p=0.001).

**Conclusions:** Three of four students has positive attitude towards PBL which is similar to the feedbacks we routinely get for every PBL. So, the feedback form is also a reliable and trustworthy form that can be used for curriculum evaluation.

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**Title:** Examining the Epistemological Beliefs and Problem Solving Skills of Physician Candidates  
**Presenter:** Adem Parlak  
**Authors:** Adem Parlak, Sedat Develi, Baris Sezer, Fatih Yazar, Süleyman Ceylan  
**Institute:** Hacettepe University, Ankara, Turkey  
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**Abstract:** A lot of the problems that we are often confronted with, either in our personal lives or in the workplace, are mostly ill-structured, that is, problems for which there is real uncertainty as to how they can best be solved. Empirical findings showed that epistemological beliefs affect reasoning about ill-structured problems. But there is no a lot of study about this subject. In this context, the aim of this study was to determine the relationships between problem solving skills and epistemological beliefs of physician candidates.

**Method:** Random sampling was used to select the participants for the study. The research concentrates on 268 students from Gulhane School of Medicine. The majority of the participants were males. “Problem Solving Inventory” was used to measure problem solving skill levels of participants and “The Epistemological Beliefs Questionnaire” was used to measure epistemological beliefs. Necessary analyses were made by using SPSS 15.0 package program. Statistical treatment included basic and correlation analysis.

**Findings and Conclusion:** According to the results, significant differences were found on the problem solving skills in terms of epistemological beliefs. Physician candidates largely believe that learning depends on ability. Physician candidates, the least sophisticated belief of physician candidates was found to be the belief for effort, and their most sophisticated belief was that learning depends on ability. According to the bivariate correlation analysis, except for learning depends on efforts, others learning depends on ability and existence of one single truth significantly correlated with problem solving skills.

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**Title:** Medical Students Perception of Their Roles in Medical Education at Ibn Sina National College, Saudi Arabia  
**Presenter:** Hani Salem Atwa  
**Authors:** Hani Salem Atwa, Rashad Hassan Al Kashgari  
**Institute:** Ibn Sina National College for Medical Studies, Saudi Arabia  
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**Abstract:** Background and Aims: Ibn Sina National College for Medical Studies is the first private medical college under the supervision of the Saudi Ministry of Higher Education. It encompasses four health professions education programs: Medicine, Dentistry, Clinical Pharmacy, and Nursing. The Medicine program runs an integrated curriculum and uses problem-based learning (PBL) and interactive lectures as the main methods of learning/teaching. The primary role of students in any higher educational institution is learning. However, in modern education, especially in medical education, the student is not just a learner. Students are considered as a valuable source in medical education through their other roles as teachers, assessors, leaders, and quality controllers. The rationale behind this research is to assess the perception of students of their roles in order to help plan for more involvement of the students in such roles if needed.

**Methods:** A self-administered questionnaire was devised to include the different expected roles of medical students during their study at medical schools, and the students’ perception of each. It was given to a random sample of 285 students (131 males and 154 females) from different academic years at Ibn Sina College. Perception was expressed on a 5-point scale ranging from “Strongly Agree” to “Strongly Disagree”. Data was collected and entered to SPSS v.20 and descriptive statistics were applied. Statistical significance was set at p < 0.05.

**Results:** All (100%) males and females agreed that their primary role at a medical school is...
“learning”. Perception of “Team Leader” and “Teacher” roles comes next to “Leamer”. “Assessor” and “Quality Controller” roles were the least perceived by the students. Figure 1 shows a comparison of the students’ perception of different roles.

Conclusions: It is normal that students perceive learning as their primary role in medical schools. High perception of “Team Leader” and “Teacher” roles may reflect the teamwork activities that occur during different stages of education at Ibn Sina College, where the students are requested to work in teams and to prepare micro-lectures on specific assigned topics to teach them to their peers (peer-teaching). More attention should be paid to raise the awareness of the students towards their important roles as “Assessors” and “Quality Controllers” and giving them enough chance to practice such important roles.

Title: Do Students of Vocational School of Health Sciences Ready for Interprofessional Education in Turkey?

Presenter: Funda Ifakat Tengiz
Authors: F. I. Tengiz, E. Ergonul Kulac, N. Demiral Yilmaz, S. Oncu, E. Kalyoncu, A. Akkoçlu, I. Semin
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Abstract:

Background and Aims: Interprofessional Education (IPE) defines together learning of the students from two or more professions from health or social care areas with the aim of having cooperation practices for patient based health care in all or a part of their trainings. The World Health Organization (WHO) has formed a working group on the subject where the participants are from various professional fields and has published a text frame describing the current situation and containing recommendations. IPE is present in various health professions education curriculum in the world. In our country, there is a need to develop training programs in this regard. For the success of a training program; it must be accepted by faculty members, students and education administrators. The main objective of this study is to assess the readiness of health care students for interprofessional education.

Methods: The study designed as a cross-sectional one comprised well-established four Vocational Schools of Health Services in Turkey. The number of the students in the study was 817. The data were collected with the Readiness for Interprofessional Learning Scale (RIPLS) developed by Parsell and Bligh (1999). The scale includes (19 items) three subscales:
1. teamwork and collaboration,
2. professional identity,
3. roles and responsibility.

Each item is measured using a 5-point Likert scale. The instrument was handed out to students in the survey in June 2015. The data collected from the vocational schools of health care were entered into a standard data base by the researcher(s) in the relevant school. To analyze the data, descriptive statistics, Student's t-test and One-way ANOVA were used. Data analysis performed using PASW statistics for Windows (SPSS,Inc.IBM) version 21.0.

Results: The majority of participants were female (%76,1) and were studying for their first degree (%54). The majority of the students (%82.6) who participated in the study were willing to choose their faculties. %70.6 of the students were satisfied with their departments. % 80.9 of the participants consider themselves successful. %18.2 of the participants indicated that they had a family member who was, or still is, working as a healthcare professional. The mean total score for the RIPLS was 70.8±10.6. (min.19-max.95). The mean score for the subscale 1 was 35.9±6.4 (min.9-max.45); subscale 2 was 25.1±4.6 (min.21-max.35); subscale 3 was 9.7±2.6 (min.3-max.15).

Conclusions: Study results will lead the program developers for planning of the events related to IPE in our country. Moreover, it is the first step to increase the awareness of the students. As a result of the study it is found that Vocational School of Health Services Students are ready for IPE. It is planning to implement IPE during the next training semester for schools which participated in the study.

Keywords: Education, Interprofessional Education (IPE), Collaborative Practice, Health Care Students.

Title: Future’s Emergency Medicine Residents’ Education

Presenter: Adem Parlak
Authors: Adem Parlak, Baris Sezer, Sedat Develi
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Email: suleymanyildirim@medipol.edu.tr

Abstract:

Introduction: Emergency medicine is a medical specialty involving care for undifferentiated, unscheduled patients with acute illnesses or
injuries that require immediate medical attention. While not usually providing long-term or continuing care, emergency physicians undertake acute investigations and interventions to resuscitate and stabilize patients. The emergency medicine residents’ education enterprise is just beginning to venture beyond its traditional emphasis on conveying diagnosis and treatment skills, to meaningfully integrating these new elements into clinical curricula.

**Discussion:** A select number of undergraduate programs, medical schools, and residency programs have begun to emphasize the importance of quality improvement methods and interdisciplinary teamwork. These pioneering programs are leading the way, proactively developing a foundation for the dramatic change needed in emergency medicine residents’ education. In addition to notable schools and residency programs responsible for the accreditation of residency programs in several countries, have begun to outline detailed expectations for systematic change through its next accreditation system, which emphasizes the achievement of concrete milestones for each of six core competencies (Patient care, medical knowledge, professionalism, systems-based practice, practice-based learning, interpersonal and communication skills). Systems-based practice and practice-based learning and improvement requirements are both included in next accreditation system as necessary components to residency programs. As these changes indicate, the time has come to align the goals and outcomes of emergency medicine residents’ education with the needs and direction of the nation’s healthcare system and workforce.

**Conclusion:** Restrictions on medical educators have prompted them to seek alternative methods to teach emergency medical knowledge and gain procedural experience. The time honored concept of see one, do one, teach one is no longer tenable. Future’s emergency medicine residents graduates can indeed perform in those areas in which they are expected to be expert and that their performance reaches an objective level in terms of decision making, overall management, and timeliness of interventions. Enhancing capabilities to quantitatively evaluate resident and curriculum performance will be critical in determining how best to achieve these goals.

**Title:** Portfolios in Family Medicine Residents’ Education

**Presenter:** Adem Parlak
Title: Formative Assessment in Medical Education

Presenter: Adem Parlak
Authors: Adem Parlak, Sedat Develi, Baris Sezer
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Abstract:
Introduction: Formative assessments happen repeatedly throughout the academic semester. They offer valuable qualitative feedback on medical students’ current teaching–learning outcomes, and accordingly aid faculty to adjust prospective teaching methodologies in order to enhance medical students’ subsequent learning outcomes. An important aspect of curricular reform is the assurance of quality in all curricular activities, including assessment, with ultimate benefits to the stakeholders medical students and community at large. It is globally accepted that the role of assessment is not simply to assess a medical students residents on preset criteria and make a judgement but also to facilitate his learning through a continuous process of feedback and at the same time provide him/her the opportunity to improve.

Discussion: The concept of feedback in formative assessment has been accepted and embraced across educational institutes to a certain extent, as evidenced by literature. Evidences suggest that quality feedback is not only just an essential component but also a central feature of formative assessment. If formative assessment and feedback is well planned and conducted in assessment practice, effective learning can be facilitated in everyday learning activity. Over the past two decades, there has been a shift in the way academic members write about medical students learning in postgraduate education. Instead of characterizing it as a simple acquisition process based on knowledge transmission, learning is now more commonly conceptualized as a process whereby medical students actively construct their own knowledge and skills.

Conclusion: Educators and learners are challenged to foster using a reflective skills toolkit with technical skills for reflective professionalism within clinical encounters for competent and compassionate patient-centered health care. Effective implementation of formative assessment as a vehicle for fostering reflective capacity through evaluation/interpretation of clinical experience can help meet this challenge. Formative assessments will eventually have a fruitful influence on students by offering ongoing feedback on their teaching–learning outcomes and suggestions as to how to progress further. Besides, integration of a rewarding bonus system into formative assessments is favourable and yields substantial benefits, such as encouraging a dynamic learning process, relieving stress of summative assessments, and most importantly enhancing the overall course grade.

Title: Multisource Feedback in Emergency Residents’ Education

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Abstract:
Introduction: Multisource feedback (MSF), or 360-degree employee evaluation, is a questionnaire-based assessment method in which rates are evaluated by peers, patients, and coworkers on key performance behaviors. Although widely used in industrial settings to assess performance, the method is gaining acceptance as a quality improvement method in health systems. As many medical education programs shift from time based to competency-based requirements for emergency medicine resident promotion, it is crucial that core competencies can be assessed in an accurate and comprehensive way.

Discussion: Currently, there are several methods for evaluating a emergency medicine residents’ awareness of best-practice competencies, such as multiple choice tests and objective standardized clinical examinations. However, in addition, evaluation tools must be developed to assess the extent to which emergency residents carry out these behaviors on a daily basis. Many different skills and attributes of clinical supervisors are relevant to the discussion. Some, such as training qualifications and continuing professional development will be matters of record that need not be assessed by colleagues. Other attributes are more subjective and must be assessed by feedback from colleagues; these include overall competence, standards of supervision, quality of feedback provision, responsiveness and accessibility. With this in mind, a multisource feedback focuses on educational aspects of a trainer’s work can be envisaged. Medical regulators and educational bodies are endeavoring
to identify reliable and robust methods to routinely assess the competence of trainee and qualified doctors to contribute supporting evidence of ongoing performance. However, while there is agreement on the need for regular performance assessment of doctors, how best to do this is unclear. Assessment methods involving simulated patients, video observation, audits of clinical records, critical incident analysis and multisource feedback are all suggested, but these approaches involve subjective judgements and lack adequate psychometric evaluation.

Conclusion: Assessment is an essential step in the curricular development process. An evaluation method is important for the improvement of the quality of learning among emergency medicine residents; however, such method is rare. Concern about the inability of monitored examinations to assess the full spectrum of clinical competence, including humanistic quality, knowledge, and communication skills, stimulated the introduction of the patient and peer assessment module, multisource feedback, medical education, emergency medicine.

Title: Rethinking Problem Based Learning with the Perspectives of Students of Meram Medical School

Presenter: Nazan Karaoglu
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Abstract: Background and Aim: Concerns about raising qualified physicians to meet the changing demands of the new century resulted in reforms in medical education. In a cross sectional, descriptive design, preclinical medical students in voluntary basis fulfilled the questionnaire form which has demographic questions, open ended items and PBL Attitude Scale (PBLAS). Via SPSS version 13.0. Categorical, continuous variables were determined and p values <0.05 accepted as statistically significant.

Results: We analyzed 427 questionnaires representing 55.5% of the students in preclinical years. Forty two percent were male (n=178) and 47.8% were first year students (n=204). The Cronbach's alpha of the PBLAS was 0.92. The mean PBLAS score was 74.64 ± 14.96 points (min=26; max=92) and PBLAS score of third years were significantly lower than first years (p=0.014). Female students had more positive attitudes than males (p=0.008). The increase in PBLAS score was in positive correlation with the satisfaction from PBL scenarios (r=0.275; p=0.001).

Conclusions: Three of four students has positive attitude towards PBL which is similar to the feedbacks we routinely get for every PBL. So, the feedback form is also a reliable and trustworthy form that can be used for curriculum evaluation.

Title: “I am Developing My Surgical Skills”; An Example of Special Study Module in Ege University Faculty of Medicine

Presenter: Nilufer Yilmaz
Authors: Nilufer Yilmaz, Ayse Hilal Bati, Taylan Ozgur Sezer, Oken Bilge, Cuneyt Hoscoskun
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Abstract: Background and Aims: Skill trainings are usually conducted in skill laboratories on mannequins/models. Problems are encountered in transition from using skills acquired in skill trainings that are limited to practices on mannequins and models to performing those skills on real patients. In this special study module on surgical interventions, abscess models were developed and it was aimed that students learn abscess drainage skills on real patients with the support and under the supervision of educators. The aim of this study is to introduce the “I am developing my surgical skills” module that was conducted as a special study module in Ege University Faculty of
Title: Medical Education at Bezmialem Vakif University School of Medicine

Example

Presenter: Ali Ihsan Tasci
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Abstract:

Aim: One of the most significant changes seen in the medical education around the globe within the last years is the development of a top-down educational approach, which takes graduation outcomes and qualifications of the graduates into consideration and is grounded on these qualifications. While revising and enriching its curriculum in June 2014, Bezmialem Vakif University School of Medicine benefited from 2014 National Core Education program to a great extent and developed its curriculum accordingly. The goals were to develop an outcome-oriented and fully integrated program, to meet the requirements of the national standards of medical education, and to live up to the international scientific standards by achieving continuous improvement and development in the quality of medical education. This study aims to contribute to the educational programs of other medical schools by sharing medical education experiences at Bezmialem Vakif University School of Medicine.

Methods and Processes: Bezmialem Vakif University, which was founded in 2010 as a continuation of Vakif Gureba Hospital established by Bezmialem Valide Sultan, is the first health university in Turkey. It encompasses Schools of Medicine, Pharmacy, Dentistry and School of Health Sciences along with various associate degree programs. At Bezmialem Vakif University School of Medicine, the qualifications prioritized in medical training approach are developing good communication, being a team member, having humanitarian values and responsibilities, respecting human rights and differences, upholding ethical and professional values, having legal responsibilities and being stick to these responsibilities, fighting against the anti-professional and anti-ethical situations, protecting the health and safety of the patients and the personnel working with doctors, being open to continuous development and change with the feedbacks, planning and managing the development, assessing the health systems, policies and management critically with the process and consequences in a way which will prioritize public health, embracing right-based approach in health, ensuring equality of opportunity, fighting with the shareholders against the barriers in accessing the health services. The process of developing and revising School of Medicine curriculum started in June 2014. The aim of the medical school education is to train competent doctors, who display "integrated (bio-psychosocial and cultural) approach, implements medical practices "knowledgeably (based on evidence) in line with humanitarian and professional values (professionalism)", who are open to continuous professional and individual development", and who are capable of performing all health-related processes in a way which prioritizes the "individual and social interest". Bezmialem Vakif University implements a fully integrated, outcome oriented and extended core educational program in medical education. Scientific competence, values and responsibilities are the underlined qualifications for the graduates. The most remarkable achievements seen in the medical education within the last years is the development of a top-down educational approach,
which takes graduation outcomes and qualifications of the graduates into consideration, and is grounded on these qualifications.

While Bezmialem Vakıf University School of Medicine Curriculum was Developed:

1. A strategic plan was prepared with the participation of all faculty members and students and was put into practice upon the approval by the University Senate. Strategic plan, medical education vision, mission, strategic goals and targets of the School of Medicine were determined. Target-specific applications in managing the School of Medicine Deanship and Strategic Plan Coordination Board were initiated.

2. Graduation qualifications of our School of Medicine were determined by taking the goalsand pre-graduation national qualifications of medical education and strategic plan into account.

3. With the comprehensive symptoms and cases of our faculty, core diseases/clinic problems, basic medical applications, basic medical scientific boards consistent with the outcomes, units and course lists, internship groups and internship training contents, which are compatible with National Core Education Program, Bezmialem Vakıf University School of Medicine Core Education Program was formed.

4. Bezmialem core education program was divided into levels for 6 years and spiral curriculums were created. Accordingly, vertical integration was achieved by taking vertical integration, board exams, goals and outcomes into account and combining relevant units and courses.

5. Education methods, measurement and evaluation techniques were determined according to the goals and outcomes of educational boards and learning objectives of the courses.

6. The infrastructure of the education was reform by remodeling skill laboratories, OSCE exam center and student clinics. Software services were purchased for creating and following the curriculum, monitoring the student development and for electronic exams.

7. BezmialemVakıf University School of Medicine made a comprehensible curriculum collaboration agreement with John’s Hopkins University for medical education. “Scholarly Concentration” program, which is being implemented at Johns Hopkins’s University, is now being implemented at our school as “Bilimsellik Kurulu” in Turkish. Furthermore, Basic Qualifications and Medical Law course board teaches professional values and responsibilities, communication, team membership, management, professionalism, sanitation and medical law.

8. Within the scope of the in-service training, School of Medicine faculty members were certified with “Educational Formation Training” programs. “Educational Formation Education” was laid down as a condition to promote as a Faculty Member and for being appointed. In the second step, a course on measurement and evaluation methods was organized for the faculty members.

The biggest problem ahead of the abovementioned applications was particularly the limited time of the Faculty Members to complete their education programs. It is almost impossible for clinicians to spare time for activities apart from patient care because of the central location of our university in İstanbul, its historical past and wide range of patient population. As a solution, the School of Medicine prioritized education over patient care and made it possible for Faculty members to conduct academic studies, and created an environment convenient for Faculty members to publish their academic studies.

As a Result: Bezmialem Vakıf University has benefitted from national and international medical educational standards to raise the quality of education. At the same time, with the participation of all faculty members and students, strategic planning and curriculums for each class were created. Physical infrastructure was improved and software was purchased for education and application. This process was successfully conducted with the determination of the management to overcome the existing problems and devotedness of the faculty members.

Title: Perceptions of Students on Educational Environment at a New Medical Faculty, Istanbul Medeniyet University

Presenter: Seda Artis
Authors: Seda Artis, Ramazan Omer Yazar, Bilal Demir, Merve Sena Kiraci, Semanur Keskin, Merve Nur Bayır, Tarik Artis
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Abstract:
Aim: Students’ perception on educational environment has an important role on learning and educational process. The DREEM questionnaire is
Title: Comparison of Undergraduate Medical Education National Core Curriculum 2014 with Application of Biochemistry Education in Turkey

Presenter: Türkan Yiğitbaşı
Authors: Türkan Yiğitbaşı, Sibel Erdem, Nesrin Emekli
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Abstract:
Background: With the aim of standardization in medical school education, National Core Curriculum was initiated in early 2000s. In the following years, the curriculum has been revised several times and finalized in 2014. Since then, the focus is living systems at molecular level and processes occurring in living matter. Biochemistry is one of the fundamental sciences that study the chemical processes occurring in living matter. Since its focus is living systems at molecular level, it is being taught worldwide as a primary subject in several health science disciplines including but not limited to Medical School, School of Dentistry, Pharmaceutical Science, School of Nursing, Midwifery and Nutrition. Importance of biochemistry education is further emphasized in the United States of America by challenging medical school requirements, which could be either biochemistry degree from two-year college or completion of biochemistry course series in several times and finalize it in 2014.

Method: DREEM was performed to volunteer students from 1st (n=37) and 2nd phases (n=42, 34 of whom had participated also 1 year ago) at the end of educational phases. Statistical comparisons were performed on basis of gender, phase, and pass scores. Also previous results were compared for phase 2 students who had answered the questionnaire previous year.

Results: Overall result was “more positive than negative”. The subscales of perceptions were as follows: learning as “a more positive perception”, teaching staff as “moving in the right direction” and atmosphere as “a more positive attitude”. Academic and social self-perceptions were interpreted as “feeling more on the positive side” and “not too bad”, respectively. There was no difference between females and males at any of the scales. Except social self-perception, scores from all scales were statistically higher for phase 2 students than phase 1 students. Although there was no change in the interpretation, perception of learning and the overall scores revealed statistically lower numbers for the students re-answered the questions as phase 2 students. Pass scores were positively related to both academic self-perception, and overall score.

Conclusion: As a newly established medical faculty, DREEM analysis contributed us to evaluate the quality of educational environment. We believe taking steps accordingly will help to achieve better improvement to reach “excellent” on medical education.

Aim: In this study, we aim to compare classical biochemistry education in medical schools with National Core Curriculum.

Method: The biochemistry subjects that are required to be covered in the National Core program are listed. The prepared evaluation form has been sent to the Head of Biochemistry Departments in several Medical Schools using National Core Curriculum in Turkey. Both number and percentage values of the results are obtained.

Results: Even though the subjects such as “working with biological materials”, “blood glucose level measurement using glucometer”, “complete urine analysis, (including microscopic assessment)”, “measurement and evaluation of hemolysis and hemolysis time” are covered in the medical school’s curriculum some of the crucial subjects were omitted. Filling out laboratory request form”, “obtaining biological sample using appropriate methods”, “on time delivery of the biological sample to the laboratory”, “assessment, validation and evaluation of the biological sample” were among several subjects that were not included in the medical school’s curriculum.

Conclusion: The results concluded that biochemistry education in medical schools could not go beyond fundamental level biochemistry. It was concluded that it is necessary to include medical biochemistry in the fifth year of the medical school to be able to complete inadequate curriculum.

Title: Worldwide Biochemistry Education in Health Sciences

Presenter: Sibel Erdem
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Abstract:
Background: Biochemistry is one of the fundamental sciences that study the chemical processes occurring in living matter. Since its focus is living systems at molecular level, it is being taught worldwide as a primary subject in several health science disciplines including but not limited to Medical School, School of Dentistry, Pharmaceutical Science, School of Nursing, Midwifery and Nutrition. Importance of biochemistry education is further emphasized in the United States of America by challenging medical school requirements, which could be either biochemistry degree from two-year college or completion of biochemistry course series in
four-year college. The reason for biochemistry to be one of the required subjects in health sciences is that acquired biochemistry knowledge is used to understand the mechanisms of diseases, diagnosis, treatment, prognosis as well as to explain and understand drug mechanisms. In today's science and technology, for such a crucial and rapidly expanding subject, the content and study period of biochemistry has to be standardized in each field of undergraduate education.

**Aim:** We aim to emphasize the importance of biochemistry education, which is the foundation of many disciplines, for various health sciences. In addition, we aim to make worldwide comparison of biochemistry curriculum in different health science institutes and departments.

**Method:** Biochemistry curriculum of a number of health science departments of public and private universities in Turkey has been examined. Lecture and laboratory hours dedicated to the subject have been carefully investigated. The worldwide comparison was made after detailed research utilizing Internet search engines and related universities' websites.

**Results and Discussion:** When the curriculum's of selected instutes was compared to each other, it was noted that lecture and laboratory hours along with the distributions of the class hours to course subjects varied from instute to instute. It was also noted that biochemistry is being taught in different years of the programme curriculum. Results obtained from the study clearly showed that in order to have high quality biochemistry education, it is necessary to standardize lecture topics as well as lecture and laboratory hours.

**Title:** Pre-Clinical Grades as a Predictor of Clinical Performance

**Presenter:** Ahmet Murt

**Authors:** Ahmet Murt, Recep Öztürk, Hanefi Özbek

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**Email:** suleymanyildirim@medipol.edu.tr

**Abstract:**

**Background:** Medical educators generally find it important to identify students who are likely to show poor performance at the clinical environment from their early years of study. It may be helpful if there is a correlation between pre-clinical school performance and clinical scores.

**Summary of work:** 246 students who matriculated to medical school in 2007 were studied retrospectively. The group included two cohorts who under took identical (but separate) programmes within one medical school, but each had been admitted under different criteria. Students' year based Grade Point Averages (GPAs) were calculated using a weighted mean method. Bi variate correlations were calculated between year specific GPAs for pre-clinical years and clinical studies.

**Summary of results:** Students' inter-year GPAs showed strong significant correlations ("r" ranging from 0.59 to 0.86, p<0.001). Although pre-clinical and clinical year scores were significantly correlated with each other, year 3 scores were found to be the most co related. (r=0.78 and 0.72 with year 4 and year 5 respectively).

**Conclusions:** Clinical performance of medical students may be predicted by their pre-clinical years. Take-home message Pre-clinical grades of medical students may be used as an indicator of their clinical performance and students should be provided relevant guidance early in their pre-clinical years.

**Title:** Should We Develop Different Leadership Styles for Each Specialty?

**Presenter:** Ahmet Murt

**Authors:** Ahmet Murt, A. Enes Arikan, Sandra Zeuner, Osman Hayran

**Institute:** Istanbul Medipol University, Istanbul, Turkey

**Email:** suleymanyildirim@medipol.edu.tr

**Abstract:**

**Background:** A recent survey about leadership attitudes among final year residents at a University Hospital made us think further on developing leadership skills of medical doctors.

**Summary of Work:** The leadership attitudes survey, composed of 18 questions on Likert scale was a standardized leadership tool aimed to identify the dominant leadership styles of residents: Authoritarian, Democratic or Laissez-Faire style. The survey was applied to final year residents from different departments at one university hospital in Turkey.

**Summary of Results:** Leadership styles of residents clustered according to their specialty. For example; internal medicine residents have shown higher scores on democratic style leadership than on authoritarian style. On the other hand, main trunk surgery residents have had higher scores on
authoritarian style leadership when compared to their scores on democratic style. Neither main trunk surgery nor internal medicine residents had high scores on laissez faire style. Primary care specialties such as Public Health and Family Medicine Residents’ scores for 3 leadership styles were similar which means that they didn’t develop a dominant leadership style. Residents in basic medical sciences tend to show highest scores on laissez faire style. Sub-specializing residents in internal medicine had a tendency to have laissez faire style while their counter parts in surgery showed a democratic style.

**Conclusion:** Although leadership development is a part of both undergraduate and postgraduate medical education, it is sometimes difficult to construct a formal curriculum on it. Even there is no formal education for leadership, residents of same speciality develop similar leadership styles.

**Take Home:** The leadership styles may be the outcomes of hidden curriculum of the residency program. Medical educators should think about different methodologies to develop needed leadership styles.

**Title:** Seven Years of Experience with Turkish Medical Education Workshops: An Example of How a Student-Run Workshop Adds to Faculty Development Process

**Presenter:** Orkun Kılıç

**Authors:** Büşra Öner, Melih Özdemir

**Institute:** Marmara University School of Medicine, Istanbul Turkey

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**Abstract:** Student participation in medical education development has an essential value. Medical students and faculties benefit from this interaction mutually. Students and student unions are working for better medical education by different methods. Local and National Workshops run by students are one of the most popular platforms for Medical Education discussions

**Summary of Work:** We as medical students working in the Turkish Medical Students’ Association, have held nationwide medical education workshops since 2008. Workshops are %100 student-run and the themes are decided by medical students. Until now, various number of themes included student participation, quality assurance and research education. In this research, we would like to present our experience in contributing to medical education reform process.

**Summary of Results:** Each year input got better with major improvements on student participation. Students working for these workshops were invited to be involved in curriculum development and self-review committees. Being involved in the medical education development process of their medical school made students more aware of their rights and they learned how to observe their medical school critically.

**Conclusions:** Throughout our seven years of work, we tried to present medical students’ opinions to the medical education society. As receivers of medical education, Student contribution to faculty development is essential and students’ interest in medical education is on the rise every year.

**Take Home Message:** Medical Education reform is an ongoing and never ending process. Students are more than willing to participate and take responsibility in this process.
PANEL DISCUSSIONS:
INTRODUCING MEDICAL EDUCATION REFORM IN DEVELOPING COUNTRIES:
JOURNEY OF MEDICAL EDUCATION IN PAKISTAN

Date: Oct 17, 2015
Timings: 16:00 – 17:30 hrs

Panel Discussion 1: Global Standards, Priorities and Challenges; Need for Medical Education Reform in Pakistan
Speaker: Kamran Hameed
Timings: 16:10 – 16:20 hrs
Abstract:
Since its inception Ziauddin Medical College has been a forerunner for the latest best practices in the field of medical education that include the introduction of Problem Based Learning, curricular integration with early introduction of clinical experiences and fostering adult learning strategies.

Traditional curriculum in Pakistan is teacher centered and discipline based where the various departments work in silos without any cross departmental collaboration. Student learning generally takes place through memorization of facts and assessment requirements are just the regurgitation of what was learnt. As a result it’s difficult for the students to develop concepts and have a holistic approach to patient management.

To overcome the weaknesses of traditional curriculum ZMC has followed a roadmap of innovative strategies. Steps are taken to address the content, delivery, assessment, monitoring and governance of the curriculum. The curriculum remodeling is designed to be spirally integrated. A phase wise approach to integration has been adopted. In the first phase, horizontal integration of all the basic science disciplines to be taught in a year was carried out. In the second phase, integration was done across the first three years result in System based integrated modules of Basic Science disciplines. Certain themes that deal with generic competencies have been identified and included as longitudinally running modules throughout the entire curriculum.

Content delivery has been improved by incorporating adult learning and innovative teaching /learning strategies and is continuously monitored by semester committees, curriculum committee and Department of Educational Development. Students’ contribution in their learning program is ensured by means of student representatives in the Board of Studies. Program evaluation has been incorporated into the curriculum and is regularly conducted by Quality enhancement Cell. Assessment tools being employed are also aligned to the curricular objectives of integration.

In future the plans for full integration of basic and clinical disciplines, carrying out standard setting and post hoc analyses in the field of assessment and improved governance at different levels are already prepared. The talk will highlight the lessons learnt and challenges ahead along the following pattern.

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Panel Discussion 2: Issues and Challenges in Brining Curriculum Change; How to Succeed? An Experience of IIMC
Speaker: Raheela Yasmeen
Date: Oct 17, 2015
Timings: 16:20 – 16:30 hrs
Abstract:
Over the last few years medical schools and health care delivery centers in developing countries facing with the variety of challenges from patients, society doctors and students. In response to this reforming in undergraduate medical curricula took place with introduction of emerging trends in educational strategies, teaching & learning, conforming assessment methodology and faculty development. In order to make curriculum reform/change successful, careful attention is of deemed importance in its planning, managing, implementing and evaluation phases. Through this presentation participants will be able to understand...
and apply the factors (issues & challenges) & recommendations which can influence the successful implementation of reformed curriculum and helps in sustaining the change.

Panel Discussion 3: Role of National Statutory Bodies and Leadership in Bringing the Curriculum Reform in Developing Countries

Speaker: Junaid Sarfaraz Khan
DATE: Oct 17, 2015
Timings: 16:30 – 16:40 hrs

Abstract:
The presentation aims to overview of the role of national statutory and regulatory bodies involved in designing, implementing, evaluating and analysing curricula in the country based on the national needs, international trends and focusing on the context. The presentation shall go on to highlight the challenges faced by these bodies and authorities in standardizing medical education in the developing countries like Pakistan. Moreover, the endeavor of these statutory and regulatory bodies to reform and align the curricula with the needs of the healthcare industry over the last decade will be discussed.

There exists a lack of standardization and cohesiveness at the national level and relevance with international standards and demands. The presentation will bring to the light the difficulties in standardization and reforms of national curriculum, pointing out the areas of excellence achieved so far in developing the modern curricula in the country and the challenges faced in aligning these curricular designs with national and international healthcare delivery needs, thus, paving a path for their international recognition and accreditation. The presentation shall go on to suggest a structure for the development of a national body under which subject specific faculties in collaboration with medical educationists can regulate medical education by emphasizing the need of a SINGLE STATUTORY and REGULATORY BODY that can look into this matter and its impact objectively.

Panel Discussion 4: Future of Medical Curriculum in Pakistan; What and How?

Speaker: Rashida Ahmed
Date: Oct 17, 2015
Timings: 16:40 – 16:50 hrs

Abstract:
Aga Khan University Medical College (AKUMC) is the first medical college in private sector in Pakistan, established in 1983. It has a five year programme leading to M.B; B.S degree and is fully recognized by Pakistan Medical and Dental Council (PMDC). It started with traditional, predominantly lecture based curriculum with sharply demarcated, two preclinical years (concurrent system based) and three clinical years. An Ad Hoc Group for Curricular Review was set up by the Dean, Medical College in April 1999, with a mandate to identify strengths of the curriculum and areas needing improvement with recommendations. After recommendations of the group in September 1999, a Task Force for planning and implementation of the recommended changes was formed which, worked from April 2000 to September 2002. Renewed curriculum was introduced in 2002 for the class graduating in 2007. Challenges related to infrastructure, faculty development and acceptance by faculty, students and regulatory body, during the process will be discussed.
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