

## Innovations in Global Medical and Health Education Forum Oral and Poster Abstracts

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Doha, Qatar

### Oral presentation 1.

#### Is Breaking Bad News All Bad News?

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**Background:** Breaking bad news (BBN) needs utmost sensitivity and empathy. It may irrevocably impact the life of anyone at any point in time. Requiring great communication skills, the amount and rate of information exchanged are manifestly important. BBN training should improve medical students' skills.

BBN was introduced as an OSCE with Standardized Patients (SPs) to senior medical students in 2010. This led to a five-year study from "no training" in 2010-2011 to "full training" using the SPIKES model in 2012-2014.

**Methods:** Students undertook a summative 15-minute OSCE. Features particularly assessed were logical flow, empathy, patient-centeredness, pauses between conversations, and time management. Their level of knowledge was not tested.

**Results:** With a pass mark set at 60 percent, results confirmed improved scores from 66 percent without to 83 percent with training. Faculty feedback was

given within 24-48 hours post OSCE. Minimally trained students ended interactions earlier than those who prepared in advance. At feedback, students cited stress as the reason for leaving. Females were better than males at imparting bad news. All students had to self review their video recording within two weeks. A lack of appropriate communication skills, followed by a sensitivity not to upset patients (SPs), led to most communication difficulties. Some students use blocking maneuvers to lessen the harshness. Prepared and trained students always performed better than average.

**Conclusion:** Directed training can improve BBN communication skills of students as well as their confidence, with better rapport, greater effectiveness, less medical jargon, and more organized interviews. Intervention training with SPs has been a very positive innovation.

### Oral presentation 2.

#### Inter-professional Education - Diabetes Themed Activities

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**Background:** Delivery of safe and effective patient care draws upon the experiences and expertise of numerous health disciplines. Increasingly, health professional training programs are introducing inter-professional (IPE) learning opportunities into their curriculums to prepare their students for such care. IPE refers to two professional groups learning with, from, and about each other at the same learning event, with a view to improving collaboration and the quality of care. Third year pharmacy and medical students from the College of Pharmacy at QU and at WCMC-Q attended a workshop on IPE. Competencies selected for the session included role clarification, inter-professional communication, patient-centered care, and shared decision-making.

**Methods:** Forty medical and 30 pharmacy students participated. Twelve groups, of 5-6 students discussed each others' roles in the care of a diabetic patient, gathered data from a simulated patient who played the role of diabetic patient with a recent complication, prioritized their findings, drew up a care plan, and debated it referring to best clinical practice. Participants were invited to complete a RIPLS survey, a validated instrument, (Readiness for inter-professional learning survey) which explored views on: Prior experiences in IPE, attitudes towards IPE (pre and post), preferred IPE educational contexts (lectures, simulation), preferred choice of IPE partners (nutritionists, respiratory therapists), and whether it should be assessed. Participants attitudes were explored across 28 IPE related domains, using a 5-point Likert scale. Response to the survey was on a voluntary basis.

**Conclusion:** The workshop was successfully completed, and data interpretation is in progress.

### Oral presentation 3.

#### An OSCE Curriculum for Assessment of Resident Communication Skills

Dora Stadler<sup>1</sup>; Deema Al-Sheikhly<sup>1</sup>; Ibrahim Hassan<sup>2</sup>; Lan Sawan<sup>1</sup>; Tasleem Raza<sup>2</sup>; Hassan Mobayed<sup>2</sup>; Mohsen Eleidrisi<sup>2</sup>; Mai A. Mahmoud<sup>1</sup>; Thurayya Arayssi<sup>1</sup>

<sup>1</sup>Weill Cornell Medical College in Qatar; <sup>2</sup>Hamad Medical Corporation

**Background:** As our institution transitioned to competency-based education through the Accreditation Council for Graduate Medical Education-International (ACGME-I) accreditation process, there was a need to assess residents' communication skills in a standardized setting. We developed an Objective Structured Clinical Exam (OSCE) curriculum to serve as a formative performance-based, clinical assessment tool targeting communication skills, ethics, and professionalism based on the six ACGME core competencies.

**Methods:** We developed an 11 case, two-year Standardized Patient (SP) curriculum for the formative assessment of internal medicine residents addressing core communication topics appropriate to our setting. We created a unified checklist based on the Kalamazoo consensus statement with unique descriptors/scoring rubrics for each case. Trained SPs completed the assessment and provided feedback to the trainees. Residents also completed the checklist as self-assessment and an overall OSCE evaluation.

**Results:** There have been 142 resident encounters over two years. While most residents were rated as competent in their overall skills, there was a trend for lower scores in addressing certain topics such as medical error, family conflict, and discussion of the need for a breast exam. The evaluation survey indicated that the residents found the feedback to be useful, the encounters to be practical, and a good educational experience.

**Conclusion:** The current curriculum has been a successful tool for formative assessment, and data can be used to help guide individual resident development as well as curricular planning for the residency program. Our OSCE curriculum for communications skills assessment is practical, adaptable, and transferable to a variety of settings.

### Oral presentation 4.

#### Using Webinar Discussions to Increase Connections between International Hospital- and Medical School-based Faculty

Amal Khidir<sup>1</sup>; Mary Anne Baker<sup>1</sup>

<sup>1</sup>Weill Cornell Medical College in Qatar

**Background:** Weill Cornell Medical College in Qatar is affiliated with Hamad Medical Corporation Doha, Qatar. Initially our partnership presented challenges because many of the faculty in both institutions were trained in different medical education systems. This faculty development project was designed to enhance communication and develop shared goals in delivering medical education to students and trainees, using IAMSE webinars followed by locally facilitated discussions.

**Methods:** Between 2008 and 2013 participants from both institutions participated in 10 webinar series and themes. There were 5-6 webinars for each theme. Each session was two hours in length during which participants watched the webinar live or recorded, engaged in discussions that focused on the topic, and how to apply the content to our local teaching context. At the end of each session participants completed an evaluation.

**Results:** Participants who completed evaluations for six of the series, indicated that webinars were effective (69 percent), triggered good onsite discussion (79 percent), enhanced appreciation of topics (77 percent), and were beneficial (80 percent). Discussions increased faculty engagement as well as strengthened collegial relations, networking, and collaboration between institutions. As a result of these sessions a group of individuals that included participants decided to start a Research Interest Group that met monthly during 2012-2013 to discuss different topics, to exchange expertise, and to peer review research projects developed by individuals in the group.

**Conclusion:** Webinars followed by discussions are not only an effective method to use in international faculty development, but also to help transform the medical education culture in the local context.

### Poster abstract 1.

#### **A National CPD Framework for the Healthcare System in Qatar: The Need and the Value of Alignment with Qatar Health Strategy**

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Qatar Council for Healthcare Practitioners, Supreme Council of Health

Advancing healthcare is one key aspect of the human development domain of the Qatar National Vision (QNV) 2030. The National Health Strategy (NHS) 2011-2016 is intended to propel Qatar towards the health goals and objectives contained in the QNV 2030. NHS projects, encompassed in seven goals, are reforming the entire healthcare system through a strategic view on the far-reaching and fundamental changes required to achieve Qatar's healthcare vision.

The Accreditation Department, as part of the Qatar Council for Healthcare Practitioners (QCHP), is responsible for the development and implementation of a CPD framework for all healthcare practitioners, including policies, standards, and licensing requirements. According to the NHS, this is part of the regulatory function of the QCHP that has to ensure not only the maintenance but also the continuous development of knowledge and skills of all healthcare practitioners aiming at better healthcare quality and patient outcomes. The Accreditation Department-QCHP appreciates the importance of the concept of interdependencies among all NHS projects. Our project is a vivid demonstration that having the in-depth understanding of the whole picture not only fosters the culture of professional development, but also ensures better alignment with other NHS goals especially those related to a skilled national workforce, improving healthcare quality and patient safety, as well as promoting high-caliber research.

### Poster abstract 2.

#### **Evaluating Psychosocial Support Needs of Female Cancer Patients in the State of Qatar**

Razzan Alagraa; Ahmad AbuJaber; Prem Chandra; Joanne Doughty

**Background:** Patient perceptions of psychosocial support are increasingly important to understanding appropriate holistic patient-centered care. Information is scarce regarding the attitudes of female cancer patients in Arab and Muslim populations. This study was undertaken among female cancer patients in Qatar.

**Purpose:** The aim of this study is to determine whether female cancer patients view psychosocial

support as an important part of their care strategy. Another aim of this study is to determine which demographic indicators, if any, may predict for certain preferences in care.

**Methods:** This study used English and Arabic questionnaires to glean data from female cancer patients attending clinics at the National Centre for Cancer Care and Research in Doha, Qatar. For the purpose of this study, psychosocial support was defined under four categories: (1) family support, (2) religious/spiritual support, (3) support groups, (4) physician referred support.

**Results:** Results show that a strong desire exists among the female cancer population to have psychosocial support in various areas to support their cancer journey. There was no significance between patient demographics and specific preferences for the support categories in the study.

**Conclusion:** This study may provide some areas for future research to provide guidelines for improving holistic patient care and to assist the Supreme Council of Health in meeting its targets for the Qatar National Cancer Strategy, which states that cancer treatment should be patient- centered, focusing on both medical and psychosocial needs of patients. Future directions may be aimed at special training in psychosocial support for healthcare professionals.

### Poster abstract 3.

#### Taking Simulation a Level Down: Going Basic and Observing Thinking

Guillaume Alinier; John Meyer; C. Campbell; N. Naidoo

Hamad Medical Corporation – Ambulance Services

**Background:** Simulation is becoming synonymous with technology, whether it uses computer applications, mannequins, or even actors. Simulation covers a very wide spectrum of media and processes, but what often matters most is the facilitation process of the learning experience.

**Methods:** Pilot Visually Enhanced Mental Simulation (VEMS) sessions followed by debriefing were facilitated for ambulance paramedics and critical care paramedics using scenario scripts prepared for

full-scale simulation. It involved the use of laminated cards and posters to represent the patient and equipment, a whiteboard and markers to write physiological parameters and interventions done by the crew. Scenario participants were oriented to the VEMS process, which requires verbalizing all thoughts and actions including equipment settings, and actual communication with patient and bystanders represented by facilitators.

**Results:** Feedback was collected from participants using a questionnaire that compared VEMS to the standard approach of running scenarios with an interactive patient simulator. Participants engaged very well with VEMS, rated it highly, although slightly less than our standard simulation. All would like repeated exposure especially prior to full-scale simulation. Similar clinical mistakes were “observed” in both types of simulation modalities.

**Conclusion:** VEMS can be run almost anywhere since it does not require real equipment, is highly engaging for participants, can be used for interprofessional education, and can address learning objectives similar to physical simulation modalities. Time and experienced facilitators are needed. Briefing of expectations and the process are as important as the preparation of the scenario script and clinical knowledge and facilitation style of the facilitator.

### Poster abstract 4.

#### The OSCE: HMC Ambulance Service’s Weekly Practical Assessment Event for New Staff

Guillaume Alinier; M. Mhiri; F. Vincent; C. Zarrougui; R. Mraidi; S. Spoh; J. Meyer; M. Hamzaoui; J. Sayo; C. Campbell; V. Naidoo; O. Daoussi; E. Aviles; A. Gagarin; J. Suarez; S. Bchini; R. Molina; E. Gonzales; M. El Khady; A. Al Alayah; F. Mariano.

Hamad Medical Corporation - Ambulance Services

**Background:** HMC Ambulance Service (HMCAS) recruits its ambulance paramedics from overseas, mostly with nursing qualification, and all come with variable experience, yet we need to ensure they are able to provide the same level of care and practice in accordance to our Clinical Practice Guidelines.

**Methods:** The concept of assessing skills using the Objective Structured Clinical Examination (OSCE) process was introduced to HMCAS instructors during a week-long staff development workshop. Staff were coached to develop OSCE stations and took part in pilot sessions as examiners with a new ambulance paramedic staff. The OSCE is now a core component of our ambulance paramedic training program and sessions take place on a weekly basis to assess new staff on the skills and knowledge that they have been taught up to that point. Feedback on the OSCE experience was sought from the staff through an online survey.

**Results:** 83 OSCE sessions with an average of 16 stations have been organized. Although seen as a stressful experience, instructors and staff find it a very beneficial and effective mode of assessment. It motivates staff to study and they are in favor of having an OSCE at least once a year following the completion of their orientation.

**Conclusion:** We are committed to sustaining the facilitation of OSCE sessions since they prove a very practical way of assessing 15-20 staff at a time over a wide range of skills and gauging their progress through repeated sessions. We encourage educators to explore this approach.

### Poster abstract 5.

#### E-Health Readiness and Challenges Facing E-Health Deployment in Nursing Practice: Qatar as a Case Study

Rasmeh Al-Huneiti; Wamadeva Balachandran; Ziad Al-Hunaiti

Brunel University, United Kingdom

**Background:** This paper is part of research work to develop an e-learning model for e-health education for nurses in developing countries. The objective of this study is to investigate the current e-health readiness in Qatar from the perspective of the nursing community, with the focus on the main challenges that hinder e-health adaption and implementation within the nursing practice.

**Methods:** A sample of 383 nurses working at both government and private hospitals in Qatar were

surveyed. To achieve the full understanding of the questions by nurses who use English as a second language, the questions concentrated on the main issues with short and simple wording. The completed questionnaires were collected and analyzed using Statistical Package for Social Sciences (SPSS) software.

**Results:** The results showed that the top challenges facing e-health implementation in nursing practice are of educational related aspect.

**Conclusion:** This justifies the need to establish an educational framework for e-health implementation in nursing practice since e-health is an opportunity to improve efficiency, reduce costs, facilitate communication, and enhance quality of patient care.

### Poster abstract 6.

#### OSCE Curriculum Design and Implementation: A Faculty Development Program

Deema Al-Sheikhly; Dora Stadler; Thurayya Arayssi; Stella Major; Lan Sawan; Mohamud Verjee

Weill Cornell Medical College in Qatar

**Background:** As a result of a shift to a competency-based education, there was a need identified for assessment of residents' communication skills. An OSCE program with standardized patients (SP) was developed and has been running for the last two years. Expansion of this program created the current need for additional faculty training; thus, we developed an OSCE curriculum design and implementation course.

**Methods:** We used a systematic, six-step approach to develop this curriculum. The curricular components ranged from creating a blueprint to training the SPs and piloting the OSCE cases. We identified the goals and objectives of the program. We incorporated multiple educational strategies to engage learners in active and self-directed learning. The evaluation design and methodology was carefully aligned with the objectives of the curriculum. The program development component included identifying the delivery format, the stakeholders, and availability of funding and resources.

**Results:** We developed a five-week longitudinal program in the development of an OSCE/SP for the formative assessment of residents' communication skills.

**Conclusion:** This curriculum was developed in a structured and systematic way using the six-steps approach. Although it was based on the needs of the Internal Medicine department, it can be applied to different disciplines locally, regionally, and internationally. Using the six-step approach was an efficient way to develop the OSCE/SP program, which was effective for training faculty.

### Poster abstract 7.

#### English Reading Skills of Fourth Year Medical Students at Sultan Qaboos University

Yousef Al-Weshahi; Iman Al-Habsi

Sultan Qaboos University, Oman

**Background:** Study fourth year medical students' English reading strategies, English reading proficiency level, and reading self-efficacy. It also aims at finding the correlation between these parameters.

**Methods:** Sixty-five fourth-year medical students from the College of Medicine and Health Sciences at Sultan Qaboos University, participated in this cross sectional study. Survey of Reading Strategy, IELTS reading part, and self-efficacy scale were used in the research. SORS is a valid survey with an overall reliability of 0.89.

**Results:** The strategy "Taking notes" was the highest strategy used by the male students. And the meta-cognitive strategy "Using context clues" was the highest used by the female students. 49% of all the students scored between 15 and 20 out of 40 in the reading proficiency test. There is no significant difference in the use of reading strategies among students with different English reading proficiency levels. 27.27 percent of students rated their English proficiency 7 and 8 out of 10 but according to IELTS they were modest users of the language. 6.82 percent of students rated their reading proficiency level 7 to 8 and scored band 4 (limited user of the language) in the IELTS reading.

**Conclusion:** Reading strategies enable students to overcome difficulties they encounter while reading. Despite high use of reading strategies by fourth year medical students, the English reading proficiency level of the majority of them is still low. Students tend to over or underestimate their reading proficiency level. Therefore, reading self-efficacy cannot be always an accurate method to reflect the actual reading comprehension level.

### Poster abstract 8.

#### Learning Environment for Medical Professionalism at Sultan Qaboos University

Yousef Al Weshahi<sup>2</sup>; Ahmed Khalfan Humaid Al Ghaithi<sup>1</sup>; Bader Al lawi<sup>2</sup>

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**Introduction:** The learning environment plays an essential role in medical students' professional formation. The students' interplay with the learning environment is complex and sophisticated, but an important part of that is the professional behavior of faculty they model before students on day-to-day basis. This powerful effect of faculty professional behaviors on students' professional behavior is a huge potential for developing learning for and evaluating of professionalism in medical schools. This study was aimed at measuring professional behaviors of faculty and their students as perceived by other medical students. The study aims at finding any correlation between the two groups' behaviors in the eyes of fresh graduates at Sultan Qaboos University.

**Methods:** A validated instrument developed by Louise Arnold et al (modified UMKCSOM Climate of Professionalism) based on the American Board of Internal Medicine definition of professionalism was translated and completed by 80 new medical school graduates from Sultan Qaboos University for the academic year 2013/2014. The questionnaire asked the intern doctors to quantify the frequency of certain perceived behaviors of their faculty and colleagues towards their colleagues, patients, and work.

**Results:** There were positive correlations between faculty and colleagues professional behaviors. There

was no significant difference in perceived behaviors between the two sexes, and student versus teachers. Perceived behaviors didn't show significant extreme behaviors.

**Conclusions:** The psychometrics of the instrument's scores is sound. Despite the integration of professionalism in the new curriculum there was no significant difference between the observed behaviors of faculty and medical students, which indicates the strong correlation between the two sets of behaviors. This confirms the powerful effect of faculty professionalism on their students' professional formation.

### Poster abstract 9.

#### Closing the Gap in Family Medicine Specialists: Through Three-Tier Distant Learning Modality

Heitham Awadalla, Eltyeb Eltaj

**Background:** Most of the developing countries have experienced shortage in family medicine specialists. Training institutes are few and it is very hard to meet the health systems' needs through the current post-graduation, totally in-house educational systems. In 2010 Sudan established the Public Health Institute (PHI) to contribute to solving this problem. Distant learning modality has been introduced to encourage enrolling large numbers of candidates. The aim was to study the enabling and hindering factors of distant learning modality.

**Methods:** It was a case study of the PHI. Primary data were collected from key stakeholders and teaching staff through focus group discussions and direct interviews.

**Results:** 280 students have been enrolled from six states. Three tier training system has been implemented: two phases at students' workplace (hospital rotation and healthcare center attachment); the third phase provides lectures and case studies through distant learning. This modality was found to be more convenient for both students and health managers. Main challenges reported were: constant internet connectivity, coordination with states' health authorities, and availability of qualified mentors at state level. The

training institutes have to consider the following: transforming the credit hours from being mostly direct into practical training hours, structuring and monitoring the hospital rotation period, and ensuring an effective mentoring system.

**Conclusion:** Despite its challenges, we do recommend the three tier distant learning modality for family medicine training. It has great role in both the stability of the health systems and producing large numbers of family medicine specialists.

### Poster abstract 10.

#### Closing The Gap Of Public Health Professionals: Innovative Teaching Modalities For Mass Production

Heitham Awadalla, Shahd Osman

**Background:** Most of the developing countries experience a shortage of public health professionals. Health personnel with competencies in leading and managing health systems and health facilities are limited. The current graduate educational systems fall short in meeting the health systems' need. Sudan likewise is facing a similar challenge. In 2010 the Federal Ministry of Health established the Public Health Institute (PHI) to contribute to solving this problem. Thereafter, PHI has implemented several modalities of teaching to generate the targeted numbers of public health professionals. The aim was to evaluate the different teaching modalities implemented in PHI, including in-house training, flying faculty, and the sandwich method.

**Methods:** It was a review study of the existing teaching programs in the PHI. Secondary data were collected from PHI reports, and primary data from key stakeholders and students through focus group discussions and direct interviews.

**Results:** PHI offers three Master programs in the following disciplines: Public Health, Disaster Management, and Health System Management. Three modalities of teaching have been used; in-house training, in-service training (flying faculty), and sandwich method. The conventional modality (in-house training) was not described as the preferable choice for most of these adult learners. Despite that, other modalities are challenging for both educational

managers and teaching faculty but may constitute a solution to attract health workers to public health training.

**Conclusion:** Each teaching modality has its own advantages and disadvantages. Considering those issues before jumping on one modality or the other is necessary to preserve the quality of teaching.

### Poster abstract 11.

#### Video Recordings of Lectures in an International Branch Campus of a U.S. Medical School: Beneficial or Only Desirable?

Mary Anne Baker; A. Sultan; A. Khidir; M. Mian; T. Arayssi

Weill Cornell Medical College in Qatar

**Background:** Available research on video recordings of lectures shows increasing student use of this learning aid. However, little data are available about the relationship between use of the resource and academic performance of international medical students.

**Methods:** Video recordings of all lectures delivered to a first year medical course were made available to enrolled students within 24 hours of their delivery in class. Quantitative and qualitative data was gathered to evaluate frequency and determinants of use, student feedback about their use, as well as the relationship between student viewing patterns and performance on course quizzes and tests.

**Results:** Number of video connections per student ranged from 2 to 96. Mean number of connections per student was 45.2. Mean weekly viewing time per student ranged from 0 to 53.3 minutes per connection. Student quiz grades showed little or no correlation with watching videos during the preceding week, yet 73 percent of students said videos were helpful, 78 percent found having more than one lecture version helpful, and 60 percent wanted future access to videos.

**Conclusion:** Students use and value access to video-recorded lectures, but further work is needed to learn more about how videos contribute to their learning.

### Poster abstract 12.

#### Interactive IT-Supported Teaching and Assessments in Ophthalmology

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**Background:** To develop an IT-supported curriculum for knowledge acquisition, problem-based learning, assessment standardization, and knowledge transfer of Middle Eastern eye problems, as well as for development of clinical acumen, and inculcation of reasoning power along the lines of the recommendations of the International Council of Ophthalmology.

**Methods:** The study was carried out at SQU, Oman by the authors. Structured learning program: log-books, rotational schedules, EBM supported decision trees, VR simulation, EMR-retrieved reevaluations of patients with web-based tools (PubMed, webinars), Journal clubs, videos, and interdisciplinary courses (e.g. DTHM), e-assessments, and case write-ups. A process-oriented QMS evaluated students and lecturers using questionnaires.

**Results:** The problem-based 4-week 8 hour/d learning program enabled students to diagnose common entities in the Middle East. Students attended surgery, angiography, lasers, and commanded basic clinical work-up prepared in skills labs. Assessments were scheduled twice per day as individual MC, and VR, and team case write-ups, and they counted for grades together with logbooks and attendance. Two-week additional electives were offered for practical application.

**Conclusion:** Current student learning programs in ophthalmology feature skills and lack of standardization. The shift to a competency model of knowledge is feasible and essential for comparability and competitiveness at an international level. Selection of candidates apt for a residency program can be facilitated if other influences are minimized.

## Poster abstract 13.

### Designing Scholarship Quality Questionnaires for Use in Medical Education

Katherine Bradley

Weill Cornell Medical College in Qatar

**Background:** In emerging fields of education research, one of the prime reasons for rejection or revisions of scholarly articles by editors is the lack of theoretical underpinning in their research methodology. The aim of this poster is to simply outline how to design a valid and reliable questionnaire, which should stand up better to the review process. Existing questionnaires used in medical and/or nursing education research will also be explored.

**Conclusion:** The readers should know how to:

- Design appropriate questions for a questionnaire
- Validate their questionnaire
- Understand the factorial structure of questionnaires
- Assess questionnaire reliability using statistical methods
- Know how to adapt questionnaires already published in literature.

## Poster abstract 14.

### A Global Health Education and Research Program for Medical Students in Tanzania

Sohaila Cheema<sup>1</sup>; Rob Peck<sup>2,3</sup>; Ravinder Mamtani<sup>1</sup>

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**Background:** Health profession students worldwide are expressing a strong interest in learning about global health. A similar trend has been observed

among medical students at Weill Cornell Medical College in Qatar [WCMC-Q]. Being cognizant of this enthusiasm, the Division of Global and Public Health at WCMC-Q initiated an elective program with a view to allow students to gain experience in healthcare delivery, public health, research, and introductory aspects of clinical medicine in Mwanza, Tanzania.

**Methods:** This collaborative program, developed in partnership with the Center for Global Health at WCMC in New York, is delivered and administered by Weill Bugando School of Medicine in Tanzania. Students complete an in-depth application and submit a personal statement stating reasons for their interest in the program.

**Results:** The program presents ample and unique opportunities for experiential learning in a community with limited resources. Student participants have reported many benefits - exposure to unusual patterns of infectious diseases, gaining a broader understanding of public health, acquiring improved communication skills in unique situations, and learning to provide culturally competent healthcare. Additionally, reduced reliance on imaging and laboratory findings helps students sharpen their clinical skills.

**Conclusion:** The training and experience provided to our students in this program complements their traditional medical education. This Tanzania program is an example of a structured global education and research experience available to our students. Health institutions worldwide should give serious consideration to developing viable, affordable, organized, and mutually-beneficial global education elective programs to meet the growing demand of health profession students.

## Poster abstract 15.

### Nurse Practitioners: Where Do They Fit in Global Healthcare and Education?

Kathleen de Leon-Demare, Diana White

University of Calgary in Qatar

**Background:** Nurse practitioners have provided primary health care in North America for over four decades. These registered nurses, with Master's

level education combining advanced nursing practice with primary care medicine in the context of Primary Health Care, work autonomously and collaboratively within the health care team.

**Results:** This poster presentation will highlight the research around the role and outline the scope of practice of the nurse practitioner as it relates to global health and health education.

### Poster abstract 16.

#### Tailoring Morning Reports to an Internal Medicine Residency in Qatar

Khalid Dousa; Mohammed Muneer; Ali Rahil; Ahmed Al-Mohammed; Dabia AlMohanadi; Abdelhaleem Elhiday; Abdelrahman Hamad; Bassim Albizreh; Noor Suliman; Saif Muhsin

**Background:** Morning report, a case-based conference that allows learners and teachers to interact and discuss patient care, is a standard educational feature of internal residency programs, as well as some other specialties. Our intervention was aimed at enhancing the format for morning report in our internal medicine residency program in Doha, Qatar.

**Intervention:** In July 2011, we performed a needs assessment of the 115 residents in our internal medicine residency program, using a questionnaire. Resident input was analyzed and prioritized using the percentage of residents who agreed with a given recommendation for improving morning report. We translated the input into interventions that enhanced the format and content, and improved environmental factors surrounding morning report. We resurveyed residents using the questionnaire that was used for the needs assessment.

**Results:** Key changes to the format for morning report included improving organization, adding variety to the content, enhancing case selection and the quality of presentations, and introducing patient safety and quality improvement topics into discussions. This led to a morning report format that is resident-driven, resident-led, and that produces resident focused learning and quality improvement activities.

**Conclusion:** Our revised morning report format is a dynamic tool, and we will continue to tailor and modify it on an ongoing basis in response to participant feedback. We recommend a process of assessing and reassessing morning report for other programs that want to enhance resident interest and participation in clinical and safety-focused discussions.

### Poster abstract 17.

#### Pharmacy Perspective of Interprofessional Education and Collaborative Practice in Qatar

Alla El-Awaisi<sup>1</sup>; Lesley Diack<sup>2</sup>; Sundari Joseph<sup>2</sup>; Maguy El Hajj<sup>1</sup>

<sup>1</sup>College of Pharmacy, Qatar University; <sup>2</sup>School of Pharmacy and Life Sciences, Robert Gordon University, Aberdeen, UK

**Background:** Interprofessional education is a valuable educational approach for preparing students in different health care disciplines to provide patient care in a collaborative team atmosphere. Despite the availability of evidence that supports the effectiveness of interprofessional education as an important aspect of developing health professions' students and its effectiveness, there is minimal published research on this topic in the Arab countries. The objective of this research is to explore the views, attitudes, and perceptions of pharmacy students, pharmacists, and pharmacy faculty in Qatar to inter-professional education and collaborative practice.

**Methods:** A mixed methods design is used as the conceptual framework for this research. This research comprised two phases:

1. An online, anonymous survey that incorporates the validated Readiness for Inter-professional Learning Scale (RIPLS) was developed and sent to all pharmacy students, all pharmacy faculty, and to a stratified cluster, random sample of practicing pharmacists in Qatar
2. Focus groups were conducted for each cohort to further explore interprofessional education and collaborative practice

**Results:** Interprofessional education is considered important by students, pharmacy academics, and practicing pharmacists. This research shows that the three different groups demonstrated positive attitudes towards inter-professional education and collaborative practice.

**Conclusion:** A lot of effort and hard work is needed to drive the integration and implementation of Inter-professional education forward at the College of Pharmacy in Qatar.

### Poster abstract 18.

#### **A Pioneering Initiative Towards Culturally Linguistically Appropriate Health Care: The Center for Cultural Competence in Healthcare (CCCHC) at Weill Cornell Medical College in Qatar (WCMC-Q)**

Maha Elnashar; Huda Abdelrahim

Weill Cornell Medical College in Qatar

**Background:** The authors report the rationale that led WCMC-Q to establish CCCHC and explore challenges and successes in implementing cultural competence training. As the first American institution to offer medical training in Qatar, WCMC-Q was confronted with challenges of training in a multicultural/ multilingual setting. Language barriers and lack of cultural competency can negatively impact effective communication between patients and clinical students. A cultural competence training needs to be implemented to address these issues.

**Methods:** The AAMC Tool for Assessing Cultural Competence Training (TACCT) was used to survey 16 faculty members. Survey results were used to design a cultural competence training course for medical students. 26 students were given the course, along with pre/post questionnaires to assess relevant knowledge, attitudes and skills. Other activities by CCCHC included conducting research to extrapolate local data, offering "Bridging the Gap" Medical Interpreters training to the public, building a capacity of trained medical interpreters to help WCMC-Q students, in addition to organizing the first symposium in Qatar to focus on the role of cultural competence in patient-centered healthcare.

**Results:** TACCT results showed gaps regarding knowledge, skills, and attitude towards cultural competence in WCMC-Q's existing curriculum. Pre/post evaluation showed improvement in students' knowledge following training, but they expressed their need to further practice these skills in clinical settings.

**Conclusion:** Cultural Competence didactic teaching can improve knowledge among medical students, but is not enough. The authors present a brief summary of their future plans to enhance the program by addressing cultural competence skills in clinical settings using an evidence-based approach.

### Poster abstract 19.

#### **Perception, Interest, and Barriers Toward Continuing Pharmacy Development Program at Woman's Hospital in Qatar**

Samah ElSalem; Doua AlSaad

Women's Hospital, Hamad Medical Corporation

**Background:** To investigate Women's Hospital pharmacists' perception, interest, and barriers toward continuing education.

**Methods:** A web-based, anonymous opinion survey was conducted in the pharmacy department at Women's Hospital in Qatar, where both pharmacists and pharmacy technicians were included. The survey was available online over a two-week period. It contained 11 closed ended questions, which were divided into four sections: 1) socio-demographics, 2) perception about continuing pharmacy development (CPD) program, 3) interest toward CPD topics, and 4) barriers to attend CPD program.

**Results:** The response rate was 56 percent. The perception of participants in response to CPD sessions revealed that more than 90 percent of them agreed the sessions are valuable, help them achieve their continuing educational goals, and help them develop in their daily pharmacy practice. The highest rated reason to attend CPD sessions was that the topic presented is very appealing and interesting, and helps in the daily practice (85 percent). Participants' interest for professional competencies was the highest for patient care (82 percent), while the lowest for drug distribution (33

percent). Furthermore, the highest rated topic that participants were interested in including in the CPD program was patient education and counseling (73 percent). The main identified barrier to attending CPD sessions was the lack of time and workload of the pharmacy during the day (76 percent).

**Conclusion:** Pharmacy staff at Women’s Hospital has a good perception and interest toward CPD sessions. CPD program planners shall work on resolving the identified barriers to maximize pharmacy staff benefits from the CPD program.

### Poster abstract 20.

#### Web Base Diabetes Information in Arabic Language: Follow-up and Systemic Re-evaluation

Soliman Azmy Ewis; Nahla M Afifi; Hussien Nour Eldin

WHO emphasized the importance of regular evaluation of medical Web sites’ (URLs) content in different languages. In 2005, we presented the second study to regularly evaluate the quality of the online information on symptoms and complications of type-2 diabetes available in Arabic language (ADA Annual Meeting-2005). The present study was designed to recognize and evaluate any changes in our earlier findings by re-analyzing the original URLs, as well as a more recent sample of URLs, using the same methods.

On Sept. 2014, we searched for the original 60 URLs included in the (2005) study to see if they still existed, and compared their contents with copies of the original ones. Then we repeated the 2005 search tool to randomly select 60 URLs to be evaluated for completeness and accuracy. Only 42 of the 60 original URLs still existed. Of these, 16 had additional information leading to a significant increase in completeness scores. Only 25 percent of the original URLs and only 47 percent of the new ones were developed by scientific organizations.

### Poster abstract 21.

#### The Contemporary Challenges of Emerging Novel Diseases and the Training of New Health Workforce Generation Under One Medicine

Elmoubasher Farag; H E Al-Romaihi; Sayed Himatt; Abarazig Humeda; M Mohamed Nour; A.M. El-Sayed; M. Al-Thani; S.A. Al-Marri; Mohamad Hussni; M.P.G. Koopmans; M.M. Al Hajri

Supreme Council of Health

**Background:** Recently, the world has witnessed emergence of novel diseases such as avian influenza, MERS.CO.V, and Ebola. With the growing realization that pathogens do not respect traditional epistemological divides, the ‘One Health’ initiative has emerged to advocate for closer collaboration across the health disciplines and has provided a new agenda for health professionals education in the new area. Against this background, we addressed the directions of new public health training programs that have to be developed to generate a cadre of health professionals with a broad understanding of disease control and prevention.

**Methods:** Public health training programs around the world adopted a reductionistic approach—focusing exclusively either on the human or the animal component of the zoonotic paradigm. The reductionistic approach failed to produce a trained cadre that is armed with knowledge and skills to address the factors that led to the evolution, introduction, transmission, and perpetuation of these diseases. A one health interdisciplinary program that integrates training in human and animal public health at the intersection of the ecosystem will produce a cadre that is competent and confident to meet the emerging challenges to ecohealth with its complementary components—man, animal, and the environment.

**Conclusion:** Medical education institutions need to take a pioneer step by supporting the One Health Education, Advocacy, Research and Training, aiming at sustaining the health of the communities by addressing various issues of concern shaping the future of humanity today, such as the zoonotic and emerging diseases in their education curriculums, as well as integrated training programs.

### Poster abstract 22.

#### Sudanese Medical Students’ Attitudes Towards Psychiatry Before and After Psychiatric Clerkship

Anas Ibnauf

National Ribat University, Sudan

**Background:** Recruitment to psychiatry faces many challenges; one of them is the negative attitudes of medical students towards psychiatry. To study the attitudes towards psychiatry among medical students before and after psychiatric clerkship and to identify associated factors.

**Methods:** 203 students in four Sudanese medical schools were enrolled in the study. Self-administered, socio-demographic, and the Attitudes Toward Psychiatry-30 items (ATP-30) questionnaires were distributed to students on the first and the last day of their psychiatric clerkship. Data obtained have been analyzed using SPSS.

**Results:** 92.1 percent of students scored more than 90 on ATP-30 (which means relatively positive attitudes) and the mean of all ATP scores was 107.17 (SD  $\pm$  12.965) before psychiatric clerkship and 111.58 (SD  $\pm$  15.710) after psychiatric clerkship (P= 0.002). Those who had Sudanese secondary certificates had significantly more positive attitude compared with those who had non-Sudanese certificates (P= 0.023). However, we could not detect any significant association between attitudes and other factors; age, origin, economic status, last exam result, marital status, direct contact with psychiatric patients prior to posting on psychiatry, family history of psychiatric disorders, or past history of psychiatric disorders. Female students were more likely to be affected by the psychiatric clerkship in comparison with male students. There was a positive correlation between positive attitude toward psychiatry and tendency to select psychiatry as a career (correlation coefficient= 0.461).

**Conclusion:** Medical students' attitudes towards psychiatry became more positive after psychiatric clerkship. More attention should be paid to undergraduate teaching of psychiatry.

### Poster abstract 23.

### Say Yes To Breastfeeding Initiative (Qatar's First Integrated, Collaborative, Multidisciplinary Clinical Management of Breastfeeding Program)

Mohammed Ilyas Khan; Sharara Hussein; Hani Kilani; Mohammed Al-Jusiman; Mariam Al-Sakka; Mohammed Amin Alloub; Tooba Khan; Fahmi Umar; Radhia Labiadh; Sailesh Ravat; Maysoon Mohammed; Shamsa Jabeen; Shaheena Manzur; Lubna Abidi; Farheen Shahid; Bazgha Khalil; Sarigha Malik

Hamad Medical Corporation

**Background:** Caring, Sharing and Understanding the Science of Breastfeeding Management Service has an ethical obligation to provide competent, compassionate care to mother and baby. Lactation Management is primarily a moral enterprise where healthcare providers are making decisions constantly and shall be dedicated to providing competent breastfeeding care, with compassion and respect for human dignity and rights, and uphold standards of professionalism. Breastfeeding Management care providers must have a firm grasp on the foundation principles that should guide a Physician/Nursing actions, and they need to have developed the skills and ability to reason through the myriad of ethically complex circumstances. These ethical principles guide the profession and outline commitments and obligations of the physician and nursing patient education and other related staff to self, client, colleagues, society, and the profession.

We aim to provide innovative, effective, efficient, and compassionate delivery of responsive service to achieve optimal outcomes in the science of breastfeeding for healthcare providers, mothers, babies, their families, and community considering the International guidelines and protocols, highest standards of patient safety and confidentiality.

#### Method:

- Services to Health Care Providers SERVICES TO PATIENTS.
- Presently at Alkhor hospital level, we are providing clinical management of breastfeeding, medical information, and patient family education considering breastfeeding issues.
- Many Community awareness sessions on breastfeeding.

**Result:** From March 2011 to March 2013 more than 2,800, including Qatari and Non Qatari Mothers, attended a postnatal ward and Clinic even more than one time with reference to Clinical Management of Breastfeeding.

## Poster abstract 24.

### Triangle of Integrated Care, Maternal Medications, Patient Safety, and Science of Breastfeeding

Mohammed Ilyas Khan; Sharara Hussein; Hani Kilani; Mohammed Al-Jusiman; Mariam Al-Sakka; Mohammed Amin Alloub; Tooba Khan; Fahmi Umar; Radhia Labiadh; Sailesh Ravat; Maysoon Mohammed; Shamsa Jabeen; Shaheena Manzur; Lubna Abidi; Farheen Shahid; Bazgha Khalil; Sarigha Malik

Al Khor Hospital, Hamad Medical Corporation

**Background:** Physicians, nurses, and pharmacists can play an important role in the promotion of breastfeeding and in supporting mothers who are breastfeeding.

**Methods:** As per Guidance by WHO on Maternal Medication and Breastfeeding at Hamad Medical Corporate Level, the decision was taken to place the word "Breastfeeding" on the Medicine Prescription Form Physician before writing any Medicine which may harm a Nursing Infant. We ask if mother is lactating or not. After the success of the first step, we at Al Khor Hospital started the Awareness Program by giving a Presentation on Maternal Medication and Science of Breastfeeding to Physicians and Nurses including Patient Educators. We avoid drug therapy when possible, use topical therapy when possible, use medications that are safe for use directly in an infant of the nursing infants age, use medications that are generally safe for the Breastfeeding Mother, use reliable references for obtaining information on Medication in breast milk, choose medications with the shortest half-life and highest protein –binding ability, choose Medications that are well studied in infants, choose Medications with the poorest oral absorption, choose Medicine with the lowest lipid solubility and the lowest relative toxicity of medication. Radioisotopes, antimetabolites, anticancer agents may be extremely dangerous even in miniscule doses.

**Results:** First unique outcome due to best efforts of Al Khor Hospital

Breastfeeding Resource and Management Centre in Qatar, only at HMC Hospitals does the Medical Prescription form have information asked about Breastfeeding.

**Conclusion:** Through knowledge, information, and awareness, the Al Khor Hospital is the first in Qatar to follow WHO Guidelines for Maternal Medications and Breastfeeding.

## Poster abstract 25.

### Needs Analysis of Continuing Pharmacy Development (CPPD) Program for Community Pharmacists in Qatar

Nadir Kheir; Fatima Al-Sulaiti; Hebat'Allah Fares; Ahmed Awaisu

College of Pharmacy, Qatar University

**Background:** The College of Pharmacy's Continuing Professional Pharmacy Development (CPPD) Program in Qatar University aims at enhancing pharmacy practice, and to fulfill the mandate of Qatar National Health Strategy (2011-2016). However, no needs analysis has assessed community pharmacists' (CP) competencies and professional needs.

**Purpose:** To (1) Assess the educational needs and self-assessed competency levels of CP; and (2) To design effective CPPD programs that are tailored to the needs of the country.

**Methods:** A cross-sectional exploratory study utilizing a pilot-tested questionnaire based on National Association of Pharmacy Regulatory Authorities (NAPRA) competencies and self assessment event diary (SED) that enabled the participant to document and reflect on their interactions with patients over 1 week. Qatar CPs were enrolled using a sample of convenience and purposive sampling technique. Descriptive statistics and thematic content analysis were conducted.

**Results:** The majority of respondents were males (56 percent), and have graduated from India (39 percent or Egypt (30 percent). Drug information skills (85

percent), health promotion skills (84 percent) and pharmaceutical care (89 percent) were the top-ranked CPPD educational needs. Seventy percent of the pharmacists were not satisfied with their professional competency levels. Educational needs identified in SED included medication safety and sports pharmacy.

**Conclusion:** Educational programs based on self-assessed needs will help achieve QNHS 2011-2016 by advancing the practice of pharmacy in Qatar. The use of blended methods for needs analysis is advocated in identifying professional educational needs. Similar studies are needed to identify needs of pharmacists in primary, secondary, and tertiary settings in Qatar.

## Poster abstract 26.

### Professionalism Curriculum: Developing Your Own Modules to Suit Your Multi-Cultural Context

Amal Khidir<sup>1</sup>; Magda Wagdy<sup>2</sup>; Ahmed Alhammadi<sup>2</sup>; Abdul Naser Elzouki<sup>2</sup>; Abdul-Latif Alkhal<sup>2</sup>; Khalid Alyafei<sup>2</sup>

<sup>1</sup>Weill Cornell Medical College in Qatar; <sup>2</sup>Hamad Medical Corporation

**Background:** Perceptions and interpretations of professionalism might vary depending on the trainees' and healthcare providers' background. This necessitates the alignment of the work force through professional development modules that suit the targeted audience, especially if they are multi-cultural. The goal was to develop a curriculum for trainees, faculty, and healthcare providers addressing the following objectives to: (1) Illustrate how professionalism terms interpretation might vary, and (2) Evaluate, give feedback and prepare remediation plan for lapses at Hamad Medical Corporation, Qatar.

**Methods:** We conducted a needs assessment of four disciplines to inform the curriculum development. Two curricula were developed: Comprehensive 6-hour course of three workshops for trainees, and 3-hour workshop for healthcare providers. The modules contained didactics, videos, case discussion, and role-play, addressing lapses with

patients, healthcare providers, feedback, and remediation. A 5-point Likert scale evaluation with a commitment to one change in behavior was used.

**Outcome:** To date (2012-2014), 15 trainees' courses attended by > 800 participants and 13 Workshops attended by > 480 faculty were conducted. Overall, the evaluations were 4.0-4.5 for most of the items. Many trainees committed to work on respect to colleagues and patients, altruism and team work, and faculty committed to refine feedback skills, work on handling junior faculty, and trainees. The course won the Rising Star, Stars of Excellence Award for Education by Hamad Medical Corporation, Qatar.

**Conclusion:** Designing your own professionalism curriculum is feasible and can lead to a better engagement, alignment of perceptions and commitment to change in multicultural healthcare contexts.

## Poster abstract 27.

### Enhancing EBM Experience Using e-Learning Modules, Video Encounters and Live Simulated Patients

Ziyad Mahfoud; Thurayya Arayssi; Sa'ad Laws; Ross MacDonald; Stella Major; Lan Sawan; Kristina Sole

Weill Cornell Medical College in Qatar

**Background:** EBM worldwide is taught in a standardized format where first year medical students are presented with written case scenarios, they formulate a PICO, search and appraise suitable articles, and provide a written response to the patients based on best evidence. Students' responses to course evaluations indicated a need to innovate the teaching methodology in order to enhance the relevance of EBM. Worldwide, there is a growing use of technology in education and learner familiarity in e-learning. In 2012, we piloted the use of simulated patients in EBM, and students' responses indicated preference for it. The current study looks into expanding that by also using video encounters and e-learning modules for the EBM process.

**Methods:** An e-learning module covering question formulation and searching strategies was given to

all students prior to starting the course through canvas. Acquired knowledge was evaluated using multiple choice questions online and then in class. An evaluation of using the e-learning module was undertaken to assess its usefulness and ease. All 40 Med1 students were exposed to the three different modalities for case scenarios (written, video encounter, and simulated patient). Relevance, understandability, and comfort for providing response to patients were evaluated using a 10 point Likert scale at the start of the course (after the e-learning module), after the written scenarios and then after the two different non-written modalities. Students' preferences were also evaluated.

**Conclusion:** Description of the development of new experimental methods and the analysis of students' responses will be presented.

### Poster abstract 28.

#### Developing a Longitudinal Academic Integrity Curriculum - Needs Assessment for Plagiarism

Mai A. Mahmoud; Mamoon Elbedawi

Weill Cornell Medical College in Qatar

**Background:** Plagiarism has become a growing area of research interest in recent years. Studies have shown the widespread use of Internet and digital resources has increased the incidence of plagiarism. Academic integrity (AI) is not always explicitly taught in medical schools. AI is not part of the formal curriculum at WCMC-Q; instead, it is brought up sporadically in courses. Additionally it's not clear if students and faculty are aware of the college policies regarding violation of AI. The goal of the project is to develop a longitudinal curriculum that enhances students' knowledge of AI and the serious consequences of violation.

**Methods:** Needs assessment surveys were administered to both students and faculty. The surveys are designed to acquire information about: (1) students' previous knowledge and opinions about plagiarism. (2) Opinions about what leads students to plagiarize, as well as their level of awareness about the college's official policy. The latter was obtained from both students and faculty. After IRB approval,

surveys were distributed to all 155 students and 62 faculty at WCMC-Q.

**Results:** Students, 59.4 percent responded, 67 percent were familiar with the term plagiarism before they joined WCMC-Q, 89 percent received formal teaching, 63 percent knew students who plagiarized and 29 percent plagiarized themselves. Students correctly defined plagiarism, 24 percent expressed concerns about plagiarism at WCMC-Q and shared some comments, 35 percent of faculty experienced plagiarized work more than once a month, 62 percent indicated unfamiliarity with WCMC-Q policy. Factors that contribute to student plagiarism as per students and faculty will be presented in the poster. Key lessons and progress/intervention will be presented.

### Poster abstract 29.

#### Residents' Knowledge, Skills, Attitude, of the Clinical Breast Exam

Mai Mahmoud; Dora Stadler; Deema Al-Sheikhly; Lan Sawan; Thurayya Aryassi

Weill Cornell Medical College in Qatar

**Background:** Physical exam skills are paramount in clinical medicine. Studies have shown that doctor-patient gender difference affects performance of appropriate breast examinations. Our observations at our internal medicine resident clinic correlate with these findings. Some explanatory factors hypothesized are related to culture, communication skills, and the lack of proper training and emphasis on the breast exam. However, little is known about resident physicians' knowledge, skills, and attitudes towards the breast exam in the Middle East.

**Methods:** A breast exam station was introduced as part of a formative objective structured clinical examination (OSCE) for internal medicine PGY 2&3s. A Standardized Patient (SP) wearing a breast model presented with a complaint of chest pain. Residents were asked to take a brief history and perform a breast exam, under the supervision of a trained nurse in the exam room. Both nurses and SPs provided verbal feedback to the resident and also completed an assessment form addressing residents' knowledge, skills, and attitude in

performing the exam. Residents also completed a self-assessment.

**Results:** The results of our findings demonstrate an apparent deficit in residents' performance of the clinical breast exam. Although two-thirds of residents correctly identified the location of the mass, proper techniques were not followed by the majority. Most indicated that they would like further training in how to comfortably approach and perform the breast exam.

**Conclusions:** Formal training addressing breast physical exam skills is needed. Continuous guidance and feedback to residents are crucial to ensure consistency.

### Poster abstract 30.

#### Family Medicine Clerkship Students' Reflections on Clinical Practice in Primary Care Centers in the United Arab Emirates - Commonest Key Domains of "Good Medical Practice".

Stella Major<sup>1</sup>; Engela Prinsloo<sup>2</sup>; Jawad Hashim<sup>2</sup>; Geraldine Kershaw<sup>2</sup>

<sup>1</sup>Weill Cornell Medical College in Qatar; <sup>2</sup>College of Medicine, United Arab Emirates University, Abu Dhabi

**Background:** The General Medical Council (GMC) framework (1) sets out principles and values on which good medical practice is founded and informs the education, training, and practice of all doctors in the UK and globally.

**Methods:** At the UAEU College of medicine, undergraduate students receive lectures on GMC framework and discuss hypothetical case vignettes in the lectures and PBL sessions throughout the preclinical years. With intervention in the final year, family medicine clerks assist preceptors in caring for patients in the Primary Care Centers, and as part of their coursework, are expected to submit three written reflections onto the e-portfolio based on their observations reflecting "knowledge gaps" or "interprofessional relations." These are discussed among peers and faculty members AP, JH and SM.

**Results:** Analysis of 31 reflections written by a cohort of 9 Emirati female students revealed that

the discussions fit into three broad categories: Challenges in Doctor-Patient Communication (age, language, literacy, deaf patients, use of interpreters, and abusive patients), Threats to Patient Safety (unsafe physician practice, Domestic Violence, Medical Errors and unsafe physician/patient boundaries), and the Abuse of Health Care services/systems (un-indicated sick notes, opiate abuse, irrational prescribing, VIP patients). The GMC domains which were explored most of all were; physician knowledge/ skills/ performance, (22/57) and Communication/Partnership/Teamwork (18/57). Patient safety and maintaining trust were explored significantly less (8/57 and 9/57) respectively.

**Conclusion:** Reviewing students' reflective writing can help educators use limited student contact time to focus on the less commonly encountered domains of good medical practice. (1- [http://www.gmc-uk.org/static/documents/content/GMP\\_2013.pdf\\_51447599.pdf](http://www.gmc-uk.org/static/documents/content/GMP_2013.pdf_51447599.pdf))

### Poster abstract 31.

#### International Medical Educators: Who Are They And What Do They Have To Say?

Stella Major<sup>1</sup>; Michelle McLean<sup>2</sup>; Judy McKimm<sup>3</sup>; Ana L. Da Silva<sup>3</sup>

<sup>1</sup>Weill Cornell Medical College in Qatar; <sup>2</sup>Bond University Gold Coast, Queensland, Australia; <sup>3</sup>Swansea University, UK

**Background:** Medical education is a global enterprise. Harden (2006) suggests that medical educators leave their "home" country to regions or countries to train local students and provide assistance in education and/or health ministries. In 2012, a pilot survey of international educators working in the Middle East indicated educators encountered personal and family dilemmas and issues around the academic and cultural environment.

**Methods:** The 42-item on-line survey was adapted for an international audience via websites such as MedEdWorld. It explored participants' origins, professional qualifications, where they studied and worked, types of work in which they had been involved, where they called "home," how they

viewed themselves (e.g. nationals, global citizens), challenges faced, coping strategies, and lessons learned.

**Results:** The 89 respondents comprised 58 percent males, with a mean age of 51 years (range: 28-82). Responses revealed a highly qualified, largely medical, multi-cultural, and internationally oriented workforce. Many described themselves as Westerners or global citizens, with "home" being a country adopted later in life and a trend of moving from Europe and the United States to Australasia for improved quality of life. Challenges included distance from family, work-life balance, time management, climate, culture, and security. Slower career progression, resource limitations, and bureaucracy impeded integration. Positive aspects were opportunities for personal and professional growth, learning about different systems/cultures, sharing experiences, and enhancing interpersonal skills. Support from colleagues and friends and flexibility, tolerance, courage, and determination to succeed helped adaptation to different contexts.

### Poster abstract 32.

#### Global Education in Medicine Exchange Program (GEMx): Weill Cornell Medical College in Qatar (WCMC-Q), a Participating School

Ravinder Mamtani, Sohaila Cheema

Weill Cornell Medical College in Qatar

**Background:** Medical students worldwide are looking for global health opportunities. GEMx, an initiative of United States Educational Commission for Foreign Medical Graduates (ECFMG), created to promote international student exchange among medical colleges, provides an opportunity for students and educators to engage in global dialogue, enhance collaboration, and foster multilateral partnerships among participant schools.

**Methods:** Initiated in November 2013, GEMx has completed the one-year pilot. 19 schools from 16 countries offered 300 clinical and research elective opportunities. Weill Cornell Medical College in Qatar (WCMC-Q) is one of the participating schools. Via a web-based portal the schools' profiles showcase

elective opportunities and information regarding the curriculum, contact information, location, and housing facilities. The program is well structured, guaranteeing established standards of student support and pre-agreed learning outcomes. Currently, WCMC-Q offers Population Health and Primary Care Perspectives and Sports Medicine in Primary Care Elective.

**Results:** Post-pilot, the outcomes have been favorable making considerable headway achieving GEMx values of partnership, knowledge exchange, accessibility, and affordability for abroad elective placements. WCMC-Q hosted its first GEMx student from Manipal College of Medical Sciences, Nepal. The student found the experiential learning enriching. GEMx platform provided the student experience in medicine being practiced in a multicultural, diverse environment using state-of-the-art technology and the provision of high quality, culturally competent, patient-centered care to patients.

**Conclusion:** WCMC-Q is a leader in global medical education. International electives offer insight on social determinants of health and disease, nurture unique clinical interests, and increase curiosity and awareness about global healthcare delivery and its challenges.

### Poster abstract 33.

#### The ESL Doctor: Helping ESL Students Succeed in Their Medical Studies

Kirsten Salline, Katherine Bradley, Rachid Bendriss

Weill Cornell Medical College in Qatar

**Background:** Previous research at WCMC-Q focused on the challenges administrators faced inaugurating a medical college in Qatar. However, less research focus has been placed on the challenges encountered by local students entering this institution. Nevertheless, at a faculty level there was an awareness that these students required extra support transitioning from the local education system to a Western-style education system. Hence, the Foundation Program was created.

Good English language and literacy skills are essential to succeed at WCMC-Q. While the

admissions standards are high and students in the Foundation Program are academically able, their current reading strategies may not be fit for the high stakes medical school environment.

**Methods:** To identify some of the challenges the students may face, a comparison was made between the Lexile® measure of the Foundation students' TOEFL reading scores and their English and science textbooks. These comparisons reveal that the reading level of the textbooks is above many students' reading ability.

**Results:** This poster outlines the evidence mentioned above and highlights the need for baseline assessment of students' reading skills in both their native language and English. An assessment of the strategies they currently use to decode English textbooks is also needed. This information can then be disseminated and used as a vehicle to share effective reading strategies across the medical program.

As a starting point for the sharing of good pedagogies, this poster will outline strategies currently utilized by faculty to support students' engagement in text.

### Poster abstract 34.

#### Continuing Professional Development: Piloting Interdisciplinary Grand Rounds at WCMC-Q

Julie Samson; Deema Al-Sheikhly; Thurayya Arayssi; Dora Stadler

Weill Cornell Medical College in Qatar

**Background:** Continuing professional development (CPD) opportunities are paramount to build and maintain a knowledgeable healthcare workforce. We identified a need to provide accredited professional development opportunities for healthcare providers who must fulfill requirements for US and other international licensure. In addition, as Qatar is now implementing new measures for healthcare practitioner licensing, there is also a growing local need for academic institutions to provide activities for healthcare practitioners to stay abreast of the latest developments in medicine, broaden their scope

of practice knowledge, and promote interdisciplinary collaborations for improved patient care.

**Method:** A committee of a diverse team of healthcare providers addresses the need for an interdisciplinary professional development lecture series, including topic and speaker selection. A process framework, created by the CPD division, structures and guides the committee. The framework addresses communication/marketing strategies, quality standardization via CME accreditation and other methodologies, resource allocation, and process automation and other elements of activity planning.

**Results:** 146 healthcare professionals have attended the first two monthly events. The CPD department has expanded its distribution list by 10 percent. A standard mechanism has been created for the development and implementation of future CME activities.

As part of the CME process, attendees will be surveyed on a regular basis for process improvement and needs identification. Our expanding distribution list will permit better outreach to increase the impact of our activities.

**Conclusion:** Local CPD needs can be met through structured activity planning with ongoing needs and program evaluation.

### Poster abstract 35.

#### Neuroscience Education in the Medical College: The Qatar Experience

Leopold J Strelitz<sup>1</sup>; Naim Haddad<sup>1</sup>; Basim Uthman<sup>1</sup>; Ziad I. Kronfol<sup>1</sup>; Gayane Melikyan<sup>2</sup>; Dirk Deleu<sup>2</sup>; Joseph Safdieh<sup>3</sup>; Marcellina Mian<sup>1</sup>

<sup>1</sup>Weill Cornell Medical College in Qatar; <sup>2</sup>Hamad Medical Corporation; <sup>3</sup>Weill Cornell Medical College, New York

**Objective:** Introduce a Neuroscience curriculum within a ME medical college capable of preparing its students for United States and foreign Clinical Neuroscience residency training programs.

**Background:** In 2008 Weill Cornell Medical College in Qatar (WCMC-Q) graduated 15 physicians. This

was the first time medical students studying outside of the United States had received a United States medical degree. The curriculum consists of two years of pre-medical education followed by a four-year medical program that mirrors the one in New York (WCMC) in content, sequence of lectures, and other teaching activities. Instruction is carried out by on-site WCMC-Q faculty, visiting faculty from WCMC, and video streaming using state-of-the-art teleconferencing technology.

**Methods:** The Neuroscience curriculum in the preclinical years draws faculty from neurology, neuroscience, neuroanatomy, pathology, pharmacology, physiology and biophysics, psychiatry, and radiology. The teaching modalities emphasize active student participation by providing information in the form of lectures, patient presentations and small-group tutorials, as well as laboratory sessions. Important features include problem-based analysis of classical neurological and psychiatric disorders, and the opportunity to examine both standardized and individual patients in clinical settings. Journal club sessions review papers from the current neuroscience literature and foster an understanding of contemporary research ideas and techniques. In conjunction with our clinical teaching facility in Qatar, clinical training includes two required clerkships: neurology (four weeks), and psychiatry (six weeks) during the third and fourth years of medical school. Here students practice the rudiments of the neuropsychiatric evaluation of patients. WCMC-Q provides medical interpreters for patients who speak a language other than English.

**Conclusions:** At WCMC-Q, we believe it is possible to conduct a continuum of neuroscience education necessary to prepare international medical students for their graduation to United States and foreign residency training programs.

### Poster abstract 36.

#### Facilitating Blended Learning in Biomedical Informatics

Mohamud A. Verjee; Paul Mussleman; Sa'ad Laws; Jeremy Walker

Weill Cornell Medical College in Qatar

**Background:** Information Services Librarians from the Distributed eLibrary (DeLib) at Weill Cornell Medical College in Qatar provide co-instruction to senior Primary Care Clerkship (PCC) students. Library teaching was traditionally lecture-based and passive. Topics included reviews of the PCC course support page, discussions on relevant mobile apps, and an overview of DeLib resources. The clerkship director and librarians explored a blended learning model to enhance student engagement.

**Methods:** An in-class multimedia-learning module was designed in-house, using medical informatics to encourage self-directed study and increase library resource awareness. Five objectives were outlined: to develop accurate differential diagnoses; to demonstrate an ability to find supportive library resourced information; to be better informed of medical resources for clinical decisions; to be able to identify gaps in knowledge; to distinguish topics for self-directed learning. Clinical situations were chosen and staged to deliver the highest impact for their interpretation. A suite of integrated eLearning technologies was used to create a multimedia module and tested for classroom use. Using the module, the librarians and clerkship director could facilitate evidence-based learning and clinical discussion. Clinical reasoning and critical thinking was stimulated while students evaluated the cases. Forty students were surveyed for feedback in 2014, to help determine the effectiveness and satisfaction of the new module format. Between 2010 and 2013, 120 students were taught the traditional way and will be used as controls for the study.

**Conclusion:** The survey results are yet to be fully collated but initial qualitative remarks indicates greater impact, satisfaction, and engagement.

### Poster abstract 37.

#### Sultan Qaboos University Pre-clinical Medical Students' Approaches to Learning

Dr. Yousef Al Weshahi; Hamid Salim Said Al-Badi

Sultan Qaboos University, Oman

**Background:** Deep and surface approaches are the two main approaches to learning. A deep learner tends to get the information and learns by

relating new knowledge to previous knowledge, while a surface learner wants to finish the course requirements with minimum effort.

Our objective is to determine the predominant learning approaches of pre-clinical medical students at Sultan Qaboos University (SQU) and their correlation with important demographic factors.

**Methods:** Biggs's Revised-Study Process Questionnaire-Two Factors were used to determine the predominant learning approaches in this observational, descriptive, cross-sectional study. Three demographic factors were assessed: gender, accommodation, and transportation.

**Results:** Two hundred students participated in this study (response rate 80 percent). The mean scores for deep and surface approaches were (Mean=30.06  $\pm$  SD=5.73) and (25.82  $\pm$  5.75) out of a total highest possible score of 50 respectively. According to gender, men (27.64  $\pm$  5.57) were more surface learners than women (24.36  $\pm$  5.50). The surface learning approach mean was lowest for those who lived at an SQU-Hostel (24.60  $\pm$  5.61), followed by those lived at their home (26.19  $\pm$  5.77), then those who lived outside of SQU-Hostel (27.08  $\pm$  5.28). The transportation factor showed no significant correlation with the learning approach.

**Conclusion:** The predominant learning approach among pre-clinical medical students at SQU was the deep approach. Men tended to be more surface learners than women. Living at SQU-Hostel was associated significantly with less surface approach to learning (p value = 0.037), while mode of transportation had no effect on the approach to learning.

### Poster abstract 38.

#### Maximizing Mobile Device Use in the Nursing Practice Education Setting

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**Background:** There is a paucity of research in exploring whether students in Qatar effectively use mobile devices to aid in their nursing practice

education. It has been the observation of the clinical instructor that, although students are provided with mobile devices, they often do not maximize their use. Mobile devices ensure rapid access to the most current nursing information and standards of practice.

**Methods:** This preliminary pilot is to inform the presenters of the development of a future action research study examining the effectiveness of the use of mobile devices as a learning tool in a first year nursing practice education course through promotion, role modeling, and a formal structured introduction of use by the instructor. The target population is predominately native Arabic speaking students who are enrolled in a first year nursing practice education course at a transnational university in Qatar.

**Results:** There is an expectation that students will use their mobile devices for practical applications. In the spirit of promoting self-directed learning, a structured and more detailed introduction to the expected use of the student's mobile device for knowledge and future patient safety issues will be implemented. The presenters will use a more structured way of introducing the use of mobile devices. The presenters will also promote, encourage, and role model the use of mobile devices. The presenters will share their ideas and expected outcomes of this incorporation of mobile device use into their teaching practice.

### Poster abstract 39.

#### Enhancing Student Learning Outcomes for Pharmacy Students Utilizing the Six-Step Approach to Curriculum Development

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College of Pharmacy, Qatar University

**Background:** Curriculum development is a continuous process that aims at improving the quality of the curriculum content, delivery, and assessment. The purpose of this project is to identify and address an area of potential improvement in the pharmacy curriculum at Qatar University, specifically pharmacy students' ability to perform pharmaceutical calculations accurately.

**Methods:** A published six-step systematic approach to curriculum development was used. The six steps include: problem identification, general needs assessment, targeted needs assessment, goals and objectives, educational strategies, and evaluation and feedback.

**Results:** The outcome of this project is a proposal for curriculum enhancement to improve pharmacy students' skills in performing pharmaceutical calculations. The enhanced curriculum proposes a spiral method of instruction to be introduced in the first semester of the first pharmacy professional year, specifically in the first of the professional skills course series. Pharmaceutical calculations will be revisited in the successive professional skills and integrated case-based learning course series in the form of clinical cases and structured multi-skill assessment exercises. An increase in the level of difficulty and complexity in the delivery and assessment is also planned across the other professional years for reinforcement and retention of the concepts of pharmaceutical calculations.

**Conclusion:** A six-step systematic approach to curriculum development was used to enhance pharmacy students' ability to accurately perform pharmaceutical calculations, an essential skill in building competent practitioners for the safe practice of pharmacy. The College of Pharmacy at Qatar University will continue to employ this approach to improve pharmacy education in the State of Qatar.

## Poster abstract 40.

### Pharmacy Students' Views on Their Training in Cardiovascular Disease Risk Assessment and Management

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**Background:** Cardiovascular disease (CVD) is the leading cause of death worldwide, including Qatar. CVD risk assessment is an important clinical evaluation to identify preventable cardiovascular risk factors and to predict an individual's risk of experiencing major cardiovascular events over the next five to ten years. This study explored pharmacy

students' perceptions of their training in CVD risk assessment and the barriers for providing such services upon graduation.

**Methods:** A quantitative, cross-sectional survey was done of third-year, fourth-year, and PharmD students at the College of Pharmacy, Qatar University, using an online questionnaire. Data collection was performed using SurveyMonkey®, data was extrapolated into SPSS® to perform descriptive statistical analysis.

**Results:** A response rate of 81 percent was obtained. From a list of health assessments, the majority of students correctly identified (in descending order) age, current smoking status, blood pressure, blood pressure treatment, gender, total cholesterol level, and HDL-cholesterol level, as risk factors necessary for estimating an individual's CVD risk. Students assigned high average ratings on the Likert scale for their perceived knowledge and skills in CVD risk assessment. The barrier for the provision of CVD risk assessment services upon graduation to which the students assigned the highest rating on the Likert scale was the lack of support by other healthcare providers.

**Conclusion:** Although pharmacy students perceive their undergraduate education in CVD risk assessment as strong, they also perceive that the provision of CVD risk assessment services in the current pharmacy practice environment in Qatar faces many barriers that will need to be addressed..