Background: New generation of medical students need the evaluation model for their age. This study aims to develop an electronic form in mobile phone to evaluate post-teaching.

Summary of Work: This is an action research governed on 48 5th year medical students during studying rehabilitation medicine at Maharat Nakhon Ratchasima Hospital Thailand. They were divided into 3 phases by 3 groups of student’s rotation. Phase I: The electronic form (5-points rating scales) was constructed and tested by the first group in June 2014, then it was improved. Phase II: The 2nd group answered the improved electronic form, followed by focus group and in-depth interviewing. Data were analyzed by descriptive statistics and content analysis. Phase III: The 3rd group will be studied by the same protocol in March 2015.

Summary of Results: Preliminary results of the 2nd group, average age of 22.88 + 0.72 years old, showed on overall satisfaction a good level (4.06 + 1.24). The highest score was the privacy (4.56±0.89), the lowest score was the letter size (4.12±0.96). The content analysis revealed that the 2nd group was satisfied with the electronic form because it was very convenient. However, there was room to improve this form especially the layout.

Discussion and Conclusions: Post-teaching electronic evaluation form applying via mobile phone has shown to be more convenient of getting students’ feedback and well secret-keeping. However, a good layout and notification technique need to be improved.

Take-home messages: Electronic form suited the new generation of medical students because of its convenience and rapid response of feedback.
Implementation of a peer observation programme for problem based learning (PBL) facilitators

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**Background**: PBL has been part of the medical curriculum in the University of Glasgow for many years. Although peer observation was part of initial PBL training, it hadn’t been part of ongoing staff development. To encourage exchange of good practice and reduce variation in facilitation, a formal peer observation programme was introduced.

**Summary of Work**: Facilitators were randomly paired to observe the practice of a peer, give and receive feedback and submit a short reflective piece. This study looked at reflective comments based on a set of 5 questions, with the overall aim to encourage good practice and ultimately lead to a better learning experience for students.

**Summary of Results**: Qualitative feedback showed that facilitators found the experience positive; providing reassurance and advice on how to improve performance. They were more reflective as a result of the process and found benefit both from observing and from being observed. They commented that the meetings and feedback were informal and non-confrontational, despite some prior anxieties.

**Discussion and Conclusions**: Facilitators valued the opportunity to observe a colleague and receive feedback on their performance. This enabled them to be more self-reflective, whilst reinforcing the importance of adhering to the PBL steps. It also stimulated more general discussion around facilitation. Results suggest it would be valuable to continue the process on a regular basis. Peer observation is an effective method for engaging facilitators in reflection of their teaching practice, providing feedback and encouraging scholarly discussion.

**Take-home messages**: Peer observation is useful in reinforcing good facilitation skills which may lead to a more consistent experience for students.

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Quality of teaching performance: Teachers’ self-assessment in comparison to learners’ and observers’ views

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**Background**: Self-Assessment of teachers and its accuracy is an important aspect when evaluating the quality of teaching, because research has proven self-assessment to be a difficult task. In this study teaching performance is assessed by teachers, learners and observers and is checked against adherence to trained standards.

**Summary of Work**: 60 sessions of KIT (communication, interaction & teamwork) were observed by trained observers, using a recently developed checklist and rating the overall teaching performance. Additionally teachers and learners rated the teaching performance. Correlations (τb) and Wilcoxon signed-rank tests were used to compare the assessments of the three groups. Furthermore, it was tested if the results provided by the checklist correlated with the different global ratings.

**Summary of Results**: Global ratings of learners and teachers (τb = .097, p < .03), learners and observers (τb = .15, p < .001) and observers and teachers (τb = .25, p = .04) all showed significant positive correlations, but differed in central tendency. The extent to which teachers fulfilled checklist standards correlated significantly with the ratings of learners and observers (τb = .13 and .5, p < .001) but not with teachers’ self-assessment.

**Discussion and Conclusions**: Ratings of learners, observers and teachers point into the same direction, but differ significantly. Teachers are more critical in their self-evaluation than observers, learners are least critical. Teachers don’t seem to relate to trained standards when assessing their performance.

**Take-home messages**: Teachers’ self-assessments should be accompanied by views of learners and/or experts to obtain more accurate information. Moreover, teaching standards and their importance should be made clearer to teachers.
Psychometric properties of a novel questionnaire assessing seminar teacher performance in undergraduate medical education

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Background: There is currently no concise evaluation instrument assessing seminar teacher performance in undergraduate medical education. The aim of the study was to develop a comprehensive but rather short questionnaire with good psychometric characteristics.

Summary of Work: Existing and new items (N=29) were combined to create an item pool covering all aspects of an established framework for evaluating medical educators. These were included in a pilot questionnaire version completed by 482 undergraduate students at two German medical schools. Cognitive debriefings and a Principal Component Analysis using Promax rotation were performed. The questionnaire was revised using feedback from students and Subject Matter Experts and piloted in another student cohort (N= 535). The original factor structure was verified by Confirmatory Factor Analysis.

Summary of Results: The final questionnaire contained 15 items and yielded two factors (Cronbach’s alpha 0.88 and 0.86, respectively). The two-factor model explained 60% of variance in the data.

Discussion and Conclusions: Future studies should address construct validity of the new tool by comparing it to existing questionnaires. Since items fit the Partial Credit Model – the questionnaire may be used for computerized adaptive testing paving the way for more efficient and accurate evaluation procedures.

Take-home messages: The tool has excellent psychometric properties and lends itself to innovative approaches to evaluation. This is the first report of a short questionnaire covering significant areas of seminar teacher performance in medical education.

Learners providing feedback to preceptors using fieldnotes

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Background: Providing timely, regular feedback to learners from preceptors is known to be of benefit especially in clinical settings. Regular feedback from learners to teachers is less practiced but may be of some benefit. In addition to teachers receiving immediate feedback on their teaching practices and strategies, promotion of a culture of reciprocity relating to feedback may be of benefit to the learner-preceptor relationship. There may also be benefit in providing preceptors with feedback that may be incorporated into reflective exercises or teaching portfolios.

Summary of Work: Over one year, postgraduate learners provided feedback to preceptors with whom regular clinical work was undertaken. This feedback was documented on fieldnotes (an established method of formative feedback in the training program). The content and themes recorded on the fieldnotes were analyzed by means of qualitative textual analysis.

Summary of Results: Feedback received from learners to preceptors addressed key educational concepts including direct observation, teaching specific skills, and role-modelling. Learners appreciated the opportunity to provide immediate feedback about their learning needs during the clinical experience itself. Preceptors were interested in the feedback as they could tailor learning needs to their individual learners. Preceptors were interested in the potential such documented feedback could have for reflective purposes.

Discussion and Conclusions: Established formative feedback strategies can be used to provide feedback from learners to preceptors. Such a strategy has benefits for both learners and preceptors, encourages dialogue about the learning experience, and may enhance the learner-preceptor relationship.

Take-home messages: Learner feedback to preceptors using fieldnotes has potential for many aspects of the learning experience and learner-preceptor relationship.
The Construction of Multisource Assessment Framework for Clinical Medical Teachers – The Preliminary Data about the Assessment Priority of the Assessors from Different Sources

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Background: For constructing a multisource assessment framework for clinical medical teachers, we have to know the difference of assessment priority between assessors from different sources.

Summary of Work: We designed a questionnaire to find the suitable domains and aspects for assessing teachers. Five assessment domains including teaching ability, assessment capability, personality traits, interpersonal relationship and educational management, and 12-16 aspects of each domain were list in the questionnaire. The participants were asked to give a score to each domain and aspect (from 1: strongly disagree to 4: strongly agree). The statistic methods were applied for analysing the results.

Summary of Results: Twenty-five clinical teachers, 69 residents, 53 PGY, 40 M7 students, 42 M4 students, and 29 nurses were enrolled. About assessment domains, all the assessment sources except nurses agreed that the "teaching ability" was most important. About aspects within “teaching ability”, clinical teachers, PGYs and nurses gave the highest score to “teaching content”, however, residents, M7 and M4 students gave it to “clinical reasoning”. The nurses gave the highest score to the domain “educational management”. About aspects within this domain, clinical teachers, nurses, residents, PGYs, and M7 students gave the highest score to "integrating teaching into clinical practice!". M4 students gave it to “time control”.

Discussion and Conclusions: About assessment of clinical teachers, assessors from different sources had both similar and different opinions about the assessment priority.

Take-home messages: This questionnaire survey helped us to find the similarity and difference of the assessing focuses between assessors from different sources. It assisted us to construct a well-designed multisource assessment for clinical medical teachers.
Why Surgeons Volunteer in Medical Education—Retention and Reinforcement of Faculty Motivation

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Background: This study aims at examining the underlying motives, the preference of incentives and the level of satisfaction and commitment of surgeons volunteering as faculty members for the AO Foundation, a network of more than 12,000 surgeons based in Switzerland. The ultimate goal is to find new ways for the AO to secure the succession of its key-faculty members.

Summary of Work: In a mixed-methods approach sixteen qualitative pre-study interviews were conducted, whose results were then used to design a quantitative online survey that was administered to all 4,661 registered faculty members of AO’s largest Clinical Division, AOTrauma. The 740 valid responses (16% response rate) were analyzed using the statistics tool SPSS.

Summary of Results: The results show that most volunteering faculty members are motivated by superior motives such as improving patient care, giving back the education they received and learning new skills. They report high levels of motivation, commitment and satisfaction in general with a majority being especially satisfied with the social aspects and learning opportunities their volunteering service provides. Some report the financial remuneration, the number of teaching- and faculty training opportunities should be increased. The incentives scores show that while performance feedback, training-, and leadership opportunities are important perks, financial compensation is the least preferred incentive.

Discussion and Conclusions: Considering these results, with the right strategy, AO should be able to secure the succession of its key-faculty members.

Take-home messages: In general a clearly obeyed faculty pathway, sufficient training and teaching opportunities as well as regular performance feedback seem to be key factors for the motivation of surgeons volunteering in medical education.

A Longitudinal Study of Teacher’s Attitude Toward Teaching, Thirteen Years Experience

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Background: Teaching mission of service hospital is often last priority to patient care due to increasing workloads. Besides, inappropriate preparation of teachers is a challenging problem leading to poor attitude of teaching. Hatyai Hospital, a service hospital had another teaching mission last thirteen years.

Summary of Work: A cross-sectional, longitudinal study using questionnaire was done four times. First period in 2001 before teaching, second period in 2003 one year after teaching. Third and fourth period were seven and twelve years in 2009 and 2014. A questionnaire was developed by Finucaine and colleagues (1995) including 14 items to measure attitude to teaching and attitude to teacher training using 1-7 scale from strongly disagree to strongly agree.

Summary of Results: Attitude toward teaching improved from first to fourth period especially in ”I find teaching as satisfying as other activities” the score increase from 4.0 to 5.7. Medical teachers are gradually confident in their graduates as the score increase from 4.6 to 5.64. However, the attitude to teacher training decrease in all items. What the teachers need most now is not basic educational theory but evidence based medicine as they can use in teaching and clinical practice.

Discussion and Conclusions: Teacher’s attitude and training need are changing from time to time, every medical education center have to recognize and support the staffs to enhance quality of teaching.

Take-home messages: Both service and teaching can be done successfully by good attitude teachers and faculty development programme that serve their need and institution’s need.
#5AA11 (28264)
Measuring the Impact of the Academy of Medical Educators at the Level of Individual Participants and Institutions

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Background: The Academy of Medical Educators at the Marshall University Joan C. Edwards School of Medicine (JCESOM) was established in 2004. The mission of the Academy of Medical Educators is to build excellence in teaching by supporting and nurturing preeminent medical educators, improving curriculum, and advancing educational scholarship. A study was undertaken to assess whether the academy has achieved its intended goals and purpose and to further assess how sustainable and meaningful the Academy was for the participants.

Summary of Work: Effectiveness of the Academy is measured by using the Kirkpatrick Evaluation Model. The applicability of the models is used to measure the impact of the Academy at both the individual and institutional levels. One year after their Academy experience, participants were asked to write self-reflections about the experience and its impact. These self-reflections were analyzed for various themes. Upon completion of the Academy requirements, the members were evaluated for their performance as a teacher, and their scholarly activity was monitored. The impact of the Academy’s creation at the institution level was considered as well.

Summary of Results: Participants reacted favorably to the Academy as indicated by post Academy evaluation surveys. Subsequently, they reported applying the knowledge/skills in their various teaching and learning pedagogies as well as their evaluation strategies. The impact of their learning is noted by increased implementation of educational interventions and innovation in the curriculum.

Discussion and Conclusions: After isolating the effects of the Academy it was found that the creation of the Academy has formalized the value the School of Medicine places on excellence in teaching. Through presentations and a published abstract book, it has provided a forum in which faculty can share their educational research. By creating the designation of Master Educator, the Academy provides meaningful recognition to faculty members who enhance their teaching skills.

Take-home messages: In summary, The Kirkpatrick model provides data to show how the Academy of Medical Educators has attained its goal of improving teaching effectiveness at one school of medicine. It indicates members of the Academy join a cross-departmental community of dedicated educators working together to strengthen their own teaching and to promote excellence in teaching throughout the school.

#5AA12 (25600)
Medical students’ experiences of and perspectives on role models

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Background: Role models (RM) are known to be a strong educational strategy. However, students learn from RM both consciously and unconsciously, and there is RM with undesirable behavior as professionals.

Summary of Work: To analyze medical students’ RM, 115 6th-year medical students in 2013 and 2014, who had finished the undergraduate medical program, completed a questionnaire asking about whether they observed good RM (desirable RM) or those who made them feel ‘I should not behave like that’ (undesirable RM), in terms of relationship with patients, clinical expertise, humanity, lifestyle, teaching, and community contribution. We also asked about the frequency of certain clinical experiences and emotions concerning becoming a medical doctor.

Summary of Results: All and 93 students observed actions and behaviors of RM during formal clinical training and other opportunities, respectively, and 113 and 85 students observed desirable and undesirable RM, respectively. Two students only encountered undesirable RM. During formal training, students recognized desirable and undesirable RM in terms of relationship with patients, clinical expertise, humanity, lifestyle, teaching, and community contribution. Frequent experiences of close clinical involvement increased experiences of RM. Students’ anxiety and pride were higher in those with RM experience.

Discussion and Conclusions: The majority of students had both desirable and undesirable RM. They encountered more undesirable RM in terms of relationship with patients, humanity, and teaching than clinical competency and community contribution. Students’ recognition as ‘undesirable’ may indicate that a gap exists between students’ values and each doctor’s behavior and professional standard.

Take-home messages: Students critically look at medical doctors’ attributes and behavior, including interpersonal skills and humanism.
Palestinian medical teachers’ attitudes toward modern teaching methods

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Background: Medical education in Palestine is provided by four medical schools. Online / E-learning methods of education have been proposed as cost-effective modalities in low income countries. The attitudes of medical teachers in these schools toward such modalities are yet to be explored.

Summary of Work: A self-administered 23-items questionnaire was circulated among medical teachers of one of the medical schools in West Bank.

Summary of Results: 35 participants with a M:F ratio of 8:1 were mostly PhD holders (86%). More than half of them had more than 10 years of teaching experience. Although the vast majority (89%) of respondents reported lack of educational resources, 51.4% of participants were positive about their working environment. Results showed 68.6% of participants were in favour of face-to-face teaching compared to E-learning or blinded learning.

Discussion and Conclusions: These results show a trend toward the use of traditional methods of teaching rather than E-learning. This might be related to the lack of adequate training and the well-established infrastructure.

Our results are the first of its type to provide an overview of the use of medical education methods in Palestine. Providing the necessary infrastructure and training medical teachers on modern modalities of teaching can potentially help improving the standards of medical education in Palestine.

Take-home messages: Medical teachers in Palestine are still in favour of classical methods of teaching. This study provides some guidance for decision makers involved in upgrading medical education in the country.

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Background: Physicians are vulnerable to psychopathology. Self-perception of it might contribute to the self-consciousness about the care they deserve. There is much resistance to this self-knowledge. We believe that the greater the psychosocial health, the greater their ability to adapt and overcome their psychopathology will be, thus both aspects should be studied at the same time.

Summary of Work: To identify Axis I psychopathology (DSM-IV) and psychosocial health report (RSPH) on medical professionals. RSPH was obtained from 70 graduate students at two public general hospitals in the state of Nuevo Leon by questionnaires of the Exposure to Violence, Family Functioning, General Health (GHQ-28) and Vital Events & Stress Rating (RVES). Psychopathology was explored by the Symptom Checklist-90-R (SCL-90-R).

Summary of Results: 33 were women and 37 men, with a mean age of 28.3 years. 111 out of 168 variables were correlations with significant value (p ≤ 0.05). In the SCL-90-R inventory, it was found that the most common psychopathologies were obsessive-compulsive disease, depression, interpersonal sensitivity and hostility.

Discussion and Conclusions: Psychopathology related to stress and psychosocial health was reported by health professionals. The higher the level of psychosocial health (composed by family well-being, general health index and low self-reported violence), the lower the psychopathology and stress level in health professionals.

Take-home messages: More attention should be paid to the psychosocial health of medical professionals and its impact on their well-being and their performance as care providers.