Assessment of the educational environment at a medical college in Yemen

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Background: Objectives: To assess the educational environment at faculty of medicine, University of Science & Technology, Yemen, and to identify areas of this educational environment that should be enhanced.

Summary of Work: In this cross-sectional study, the 50-Item Dundee Ready Education Environment Measure (DREEM) inventory (Arabic version) was used. It was administered to 250 undergraduate medical students of University of Science & Technology (UST) in December 2012. The purposes of the study as well as confidentiality were explained to the students before distribution of the questionnaire.

Data were analyzed using SPSS 18 software. The response rate was 80.4% (201 out of 250 students; 88 males and 113 females). The overall DREEM score was 111.5/200 (55.7%). This result indicated that the UST medical students perception of educational environment was more positive than negative. The mean total scores for students’ perceptions of learning, students’ perceptions of teachers, students’ academic self-perceptions, students’ perceptions of atmosphere, students’ social self-perceptions were 24.9/48 (51.9%), 27.2/44 (61.7%), 19.2/32 (59.8%), 24.4/48 (50.9%), and 15.8/28 (56.4%), respectively. These results showed that the students’ perceptions of atmosphere domain had the lowest score. Regarding the mean scores of items, the score of item 3 (There is a good support system for students who get stressed) was the lowest one (0.81) indicating the pressures suffered by the students.

Discussion and Conclusions: This study revealed that the medical students of UST perceived the learning environment positively. It also revealed some low-scored areas of learning environment that need some remedial measures (especially support of students and feedback).

Take-home messages: DREEM revealed areas that need to be improved, especially support of students and feedback.

Outline of an innovative learning environment of surgery: A comparison of students’ perceptions with a traditional learning environment based in a DREEM analysis

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Background: The medical faculty of Universidad de la Sabana uses a traditional learning environment (TLE) in clinical areas based in lectures and clinical rotations. Since 2012 major modifications were developed in the general surgery course through an innovative learning environment (ILE) introducing a contextual case-based curriculum, virtual resources, e-learning, integration of basic-clinic sciences, participation of students in innovative projects, active feedback and adjusts to clinical rotations.

Summary of Work: The aim of this study was to compare the students’ perceptions of TLE and ILE. The Dundee Ready Education Environment Measure (DREEM) was administered to three consecutive medical cohorts of 4th year undergraduates, to compare at the same time both environments. The five domains and the overall DREEM score were analyzed. The reliability of DREEM and its subscales was assessed with the Cronbach Alpha coefficient.

Summary of Results: 144 participants (women: 64.5%) were included (age: 21.9 ±1.49 years old). The overall DREEM score was higher in the ILE in all cohorts (Cohort 1 TLE:126±30 versus ILE:149±20; Cohort 2 TLE:101±21.6 versus ILE:153±24; Cohort 3 TLE:115±42±20.5 versus ILE:150±20). Learning, teachers and academic domains were evaluated with higher subscale scores for the ILE. Cronbach alfa showed high reliability coefficients (>0.90) for all measures in both environments and consistency in all cohorts.

Discussion and Conclusions: ILE showed overall higher scores in comparison with TLE scores in surgery according to the students’ perceptions. Further measures are necessary to compare these results and consistency overtime.

Take-home messages: As part of the faculty development, the identification of items and DREEM subscale domains with negative scores is crucial in order to promote continuous improvement in the curriculum.
ABSTRACTS: SESSION 3EE
MONDAY 1 SEPTEMBER: 1045-1230

3EE3 (23078)
Medical students' perception of the teaching environment in a Brazilian University

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Background: Positive teaching environments stimulate the acquisition and incorporation of newer concepts; conversely, negative student perceptions tend to harm such learning.

Summary of Work: To investigate their teaching environment, students from all years of the Universidade Nove de Julho (totalling 550 students) were invited to complete the Dundee Ready Education Environment Measure (DREEM), a questionnaire with a maximum of 200 points in 50 questions. It is divided in 5 dimensions (maximum scores): learning (48); teachers (44); student life (32); environment (48); social life (28). Answers were assessed with a Likert scale from 0 (strongly disagree) to 4 (strongly agree). Analysis with SigmaStat (SPSS, Chicago, IL) described variables as to their average, standard error, median, minimum and maximum values. Statistical significance of the averages’ correlation was assumed if p<0.05.

Summary of Results: Responses from 432 students were analyzed. The overall score was 105 (minimum 30, maximum 181), without significant gender differences. The lowest-graded dimension was social life, with an average of 10.72; the dimension with the best grade was ‘teachers’, with an average of 24.52. Answers were assessed with a Likert scale from 0 (strongly disagree) to 4 (strongly agree). Analysis with SigmaStat (SPSS, Chicago, IL) described variables as to their average, standard error, median, minimum and maximum values. Statistical significance of the averages’ correlation was assumed if p<0.05.

Discussion and Conclusions: The overall score indicates a predominantly positive view of the learning environment by the students in spite of their very low perception of their social life. Although the general perception of the environment was positive, critical aspects (social life being a case in point) were detected, deserving attention from decision-makers.

Take-home messages: Even in a medical course with a very good overall perception, the negative impact of medical education on the students’ social life was detected; such known aspect of medical education should be on the educators’ agenda.

3EE4 (19679)
Pre-Clerkship Medical Students' Perceptions of the Learning Environment at Arabian Gulf University/ Bahrain

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Background: Learning environment in any medical school is found to be important in determining students’ academic performance. This study was undertaken to seek the perception of pre-clerkship medical students regarding the learning environment at Arabian Gulf University (AGU), Kingdom of Bahrain.

Summary of Work: Aim: The purpose of this study was therefore to evaluate the educational environments Arabian Gulf University medical schools in Bahrain, Pre-Clerkship Medical Students using the Dundee Ready Education Environment Measure (DREEM) instrument. Methods: The combined Arabic and English version of the Dundee Ready Education Environment Measure (DREEM) instrument was used. DREEM has previously been validated as a diagnostic instrument for assessing the quality of educational environment. DREEM instrument was administered to undergraduate medical students (n=324) of pre-clerkship phase of the AGU medical program (second, third and fourth academic years) and the scores were compared using a non-parametric and parametric tests.

Summary of Results: No significant difference in the students’ perceptions were found with regard to: academic year of study and gender, while nationality and academic achievement (grades) showed significant difference (p value was 0.048 and 0.018, respectively).

Discussion and Conclusions: The present study revealed that all pre-clerkship students perceived the learning environment positively. Nevertheless, the study also revealed some problematic areas of learning environment in AGU medical school that may need some remedial measures.

Take-home messages: The overall results of the present study suggest that some changes need to be introduced in the educational strategy and process at AGU medical programme. These changes would be of immediate value to the students, the teaching staff and the institution.
3EE5 (21883)
Education environment of undergraduate students in Prapokklao Hospital

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Background: The Medical Education Centre of Prapokklao Hospital has an undergraduate medical curriculum. Our centre had assessed the education environment only in teaching and learning aspects. This study assesses more aspects.

Summary of Work: 88 medical students used the Dundee Ready Education Environment Measure (DREEM) form in 50 items which had a score of 0 – 4 and domains of learning, teaching, academic self perception, perception of atmosphere and social self perception.

Summary of Results: There are 43 male and 45 female students. The mean of scores was 139.50. The male had higher scores than female (142.60, 136.53). The 6th year students had higher scores than 5th and 4th year students (142.16, 136.85, 139.64). The high GPAX had higher score than low GPAX (145.39, 139.24, 134.85). The lowest item was “The teaching over-emphasizes factual learning” and lowest aspect was Students’ social self perceptions.

Discussion and Conclusions: Education environment in Medical Education Centre of Prapokklao hospital had a high score and no difference in gender, level of class and GPAX.

Take-home messages: Medical Education Centre should pay attention to all aspects and items of education environment especially Students’ social self perceptions and low score items.

3EE6 (21882)
Assessment of factors influencing a clinical learning environment in a Mexican clinic

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Background: The clinical environment is a concept of great importance in medical training because it affects student satisfaction, learning and academic success. In this work the ACA-UNAM, MEX instrument developed by Sutton et al Hamui Alicia in 2013, to evaluate clinical learning environments was used.

Summary of Work: Cross-sectional study. 46 doctors are being trained in specialty Family Medicine in a Mexican clinic, on the UNAM program. The survey was the ACA-MEX-UNAM questionnaire validated in the Mexican population. The instrument consists of 28 items distributed in four different dimensions: interpersonal relations (6), educational processes (9), organizational culture (6) and dynamic service (7). Each item is likert-type, rated from 1 to 4 according to the following assessment: 4: always; 3: regularly, 2: sometimes, and 1: almost never. Five surveys were eliminated because they responded with the same score for all items.

Summary of Results: The overall score was 139.4 for educational environment from a maximum of 160 (86.6%). The best qualified area was Educational Program and its implementation (89.55%), and the lowest score was the Interpersonal Relations (86.98%). The question with the lowest score is the interest of the teacher to meet beyond the professional, and the highest was the communication with the teacher in academic affairs.

Discussion and Conclusions: In this study it was found in a Mexican clinic that students are more expansive in educational environments.

Take-home messages: It is possible to evaluate the clinical learning environment with ACA-MEX-UNAM instrument.
3EE7 (20598)
How do UCEEM scores correlate with other variables related to workplace learning climate? Further exploration of validity and usability of the Undergraduate Clinical Education Environment Measure

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Background: In a previous study, evidence from various sources supported the validity and reliability of the UCEEM, a 25-item instrument developed to assess medical student clinical educational climate (Strand et al. 2013). However, the evidentiary model (Cook & Beckman 2006) suggests that the relationship of instrument scores to other variables and consequences of instrument use are underutilized additional sources to assess construct validity. Thus, the aim of the present study was to further explore the construct validity and usability of the UCEEM by investigating the relationships of UCEEM-scores to other variables relevant to the learning climate being measured.

Summary of Work: The UCEEM is currently used at different time-points during interventions intended to improve educational environments and supervisory practices at clinical departments. At two departments, the UCEEM was distributed together with the Maastricht Clinical Teaching Questionnaire (Stalmeijer et al. 2010), an instrument evaluating individual clinical teachers. Additional qualitative data including interviews with various stakeholders was collected to further evaluate the usability of the UCEEM.

Summary of Results: Results indicate that MCTQ-scores at department-level correlate with UCEEM-scores on related supervisory dimensions. Higher UCEEM-scores after quality improvement interventions coincided with awards for “best clinical rotation” in two of the studied departments. Interviews showed that student and teacher narratives of educational climates corroborated the UCEEM-scores. Teachers and educational leaders reported that results were used to target areas for development. Stakeholders valued the feasibility and scientific approach of both instruments.

Discussion and Conclusions: Relationships between scores and other variables including qualitative data support the construct validity and usability of UCEEM.

3EE8 (20593)
Do scores make a difference? Consequences of using the Undergraduate Clinical Education Environment Measure (UCEEM) and the Maastricht Clinical Teaching Questionnaire (MCTQ)

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Background: In previous studies, evidence supported the validity and reliability of scores from the UCEEM (Strand et al. 2013) and the MCTQ (Stalmeijer et al. 2010), instruments developed to assess medical student clinical educational climate and individual clinical teachers. However, Cook & Beckman (2006) suggest that instrument scores should be supported by a variety of validity evidence including consequences of using an instrument. Thus, the aim of the present study was to investigate consequences of using the UCEEM and the MCTQ to further explore their validity and usability.

Summary of Work: The UCEEM and the MCTQ were implemented in clinical departments at different time-points during interventions intended to improve workplace educational environments and teaching practices. The evaluation process and results were discussed with teachers and educational leaders in faculty development projects. Through documentation of score discussions and measures taken to furthering the processes of improving the educational environments, and through interviews with students and other stakeholders, we studied the consequences of using the instruments.

Summary of Results: Results imply that the feedback generated by the two instruments and the dialogue evolving from the evaluation process had a favorable impact on learning climates and supervisory practices. Preliminary results show how UCEEM scores improved after measures were taken to further develop aspects of the educational environments. Students, teachers and educational leaders reported that the feedback yielded by the instruments raised an awareness of e.g. learning objectives and strategies supporting student autonomy and participation in workplace practices.

Discussion and Conclusions: Evidence of consequences supports validity and usability of the UCEEM and the MCTQ.
**3EE9 (21590)**

**Improving the learning environment at the University of Vermont College of Medicine**

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**Judy Lewis**, University of Vermont College of Medicine, Psychiatry, Burlington, Vermont, United States
**Ann Rich**, University of Vermont College of Medicine, Psychiatry, Burlington, Vermont, United States
**Nathalie Feldman**, University of Vermont College of Medicine, Obstetrics and Gynecology, Burlington, Vermont, United States
**David Adams**, University of Vermont College of Medicine, Anesthesiology, Burlington, Vermont, United States

**Lee Rosen**, University of Vermont College of Medicine, Psychiatry, Burlington, Vermont, United States

**Background**: US Medical students report on the annual AAMC graduation questionnaire a significant incidence of mistreatment (e.g., public humiliation, 23%; sexist or ethnically offensive remarks, 14% and 7%, gender bias, 5%). The University of Vermont College of Medicine (COM) undertook a comprehensive effort to ensure that all stakeholders help promote positive and mitigate negative influences in the learning environment.

**Summary of Work**: The Dean created the Learning Environment and Professionalism (LEAP) committee, comprised of learning environment participants (physicians, scientists, residents, nurses, students) to formulate policies and create an action plan. Goals included improved confidential reporting of mistreatment, increased awareness, and streamlining of policies, reporting and adjudication procedures.

**Summary of Results**: The LEAP committee regularly monitors progress and evaluation data. An ombuds-person was hired for confidential consultation with learners and others. All course evaluations now address the learning environment. A confidential online reporting system was created and information on reporting mistreatment was imprinted on student identification badges. A curriculum including video vignettes was created to educate the learning community about professionalism and mistreatment. A student committee authored an honor code outlining their responsibilities in the learning environment that was overwhelmingly passed by a vote of each class.

**Discussion and Conclusions**: Changes in procedure were well received and implemented in all services. Early evaluation data indicate greater awareness of policies and high satisfaction with the ombuds-person.

**Take-home messages**: Maintaining a professional learning environment requires an institution-wide effort from all stakeholders.

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**3EE10 (19106)**

**Sex, gender and perceptions of educational environment in first year medical students**

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**Liliana Ortiz**, University of Concepcion, Medical Education Department, Concepcion, Chile
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**Eduardo Fasce**, University of Concepcion, Medical Education Department, Concepcion, Chile
**Paula Parra**, University of Concepcion, Medical Education Department, Concepcion, Chile
**Carolina Marquez**, University of Concepcion, Medical Education Department, Concepcion, Chile

**Background**: To ensure higher education quality, factors like students’ perceptions about educational environment (EE) must be considered. According to gender schema theories, there are differences between gender and sex, which motivated this study (Sponsored by FONDECYT #1121002).

**Summary of Work**: Barra’s Inventory of Sexual Role (IRI), Programs Assessment Scale (EEP) and Dundee Educational Environment Scale (DREEM) were applied to 70 first year medical students from the University of Concepción, Chile, prior informed consent.

**Summary of Results**: Analyzing the combined effect of sex (male / female) and gender (masculinity / femininity) on the dimensions of EEP and DREEM, multiple regression models do not make a statistically significant prediction of students’ perception about EE. Individually, by relating it to EEP, female is associated with more positive attitude toward career goals ($t=2.28, p<0.05$).

**Discussion and Conclusions**: Women, controlling gender effect, were more interested in career goals. Feminity, controlling sex, valued more positively assessment and time distribution. The relationship between masculinity and EE may be associated with the valuation of masculinity in health formative processes. Perceptions of EE are related to sex and gender only for some dimensions of scales applied.

**Take-home messages**: Sex and gender influence academic experiences, in different ways.
3EE11 (22789)
Welfare of medical students and climate at the University of Botswana School of Medicine

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Background: New medical schools within the Sub-Saharan-Africa have experienced a growing concern of students’ dissension towards their learning and living environments. Despite this, there is limited research in the region over the cause(s). There are studies looking at educational environment in medical schools in addition to the various stresses students encounter. We however chose to use an in-house survey that addressed climate and living conditions and concerns of students in a developing country. The survey was targeted to enrolled Medical Students at the University of Botswana, School of Medicine (UBSOM). The curriculum at UBSOM is problem based therefore requires self-directed learning. The objective of the study was to better understand the welfare of students at UBSOM.

Summary of Work: The survey was blinded and voluntary. We sought to evaluate the perceptions and expectations of the students. The survey encouraged students to share their views on how UBSOM climate could be improved. Due to limited availability, the majority of students were not offered accommodation in the university residences. We also researched on the setbacks of living in various environments.

Summary of Results: Sixty-six percent of students participated in the study. The total mean scores for students’ perception of the climate at UBSOM was positive. However, student perception of their living environment was disparaging.

Discussion and Conclusions: Students at UBSOM perceive the educational environment as having more positives than negatives. However, a number of areas need improvements.

Take-home messages: Schools within Sub-Saharan-Africa need to look closely at conditions in which students live, study, learn and work in order to build better medical professionals.

3EE12 (19140)
Clinical educational environment at the end of the Internship of Medicine in the School of Medicine, University of Chile: PHEEM survey results

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Background: The educational commitment is an obligation of educational institutions. For this, we must look at determinants of achievement in undergraduate education such as the educational environment, defined as "the most important manifestation and conceptualization of the curriculum".

Summary of Work: Objective: To describe the perception of the educational environment in boarding Hospital Gynecology and Obstetrics, Internal Medicine, Pediatrics and Surgery. Methods: Cross-sectional study using the survey PHEEM 2012 to 164 graduates, for internship and campus. Determination of differences by campus or internship. Calculating partition coefficient of variance, including survey, internship and campus.

Summary of Results: The overall score was 103.70 ± 42.38, corresponding to "an educational environment more positive than negative, with room for improvement". The interpretation by dimensions of Autonomy, Perceived Social Support teaching was "more positive than negative", "headed in the right direction" and "more pros than cons" respectively. No major differences in the breakdown by campus and interned were found.

Discussion and Conclusions: The Medical School of the University is situated very close to other national and international institutions with a student-centered curriculum. To measure and analyze these results permanently will assess the impact of changes in clinical practice and curricular innovation processes.

Take-home messages: The educational commitment is an obligation of educational institutions. The educational environment is a feature that should be evaluated for continuous improvements in undergraduate schools. This research shows this process to also contribute to the development of knowledge in view of the introduction of these processes by other educational institutions.
ABSTRACTS: SESSION 3EE
MONDAY 1 SEPTEMBER: 1045-1230

3EE13 (20268)
Life Narratives, our memories and lessons – Humanization in teaching and assistance

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Background: The process of narrating one’s own experience contributes to the re-significance of one’s own trajectory.

Summary of Work: We collected narratives about humanization experiences during a Faculty Development Process in Brazil among 480 health professionals. The participation on the study was voluntary. Qualitative analysis was performed aiming at comprehension of the meanings attributed to “humanization”.

Summary of Results: 114 women and 14 men from different health professions and fields wrote their stories. Analytic categories emerged and were divided into values and actions associated with humanization. Values expressed as inherent to humanization were: respect of the patient’s culture, his/her singularities and rights as a citizen, valorization of the human and the health team, affectivity, ethics and justice. Humanization was also expressed in behavioral changes translated into actions such as: to perceive and respond to the patient’s needs, to accept, to empathize, to care, to understand and to share responsibility.

Discussion and Conclusions: Humanization of teaching and assistance is expressed in the commitment to the autonomy of each individual and appreciation of the health professional.

Take-home messages: The narratives are a strategy to development of a critical view about health professional practices.

3EE14 (22230)
Visiting tour of medical humanities museum to explore the humanistic issues of medical practice - a pilot study

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Background: The curriculum of medical museum tour as a part of medical humanities education can be a special design. Museum of Medical Humanities of National Taiwan University College of Medicine, with its elegant architecture and historical value, is a unique humanities museum in Taiwan. It regularly holds special medical and cultural exhibitions, demonstrating the contributions of the college to medical development in Taiwan. It also provides educational and research information relating to medical humanities.

Summary of Work: In view of potential contribution of medical humanities museum touring to the educational qualities of humanities, we designed a pilot curriculum of exhibition tour for 52 medical students including clerk, intern and postgraduate first year physician (PGY) to visit the Museum of Medical Humanities. The curriculum contents include (1) main topic of human evolution and health plans for aging society; (2) humanistic issue exploration in medical practice through role presentation, topic discussion and video observation. They were asked to fill in questionnaires before and after the visit. The questionnaires and term reports were analyzed.

Summary of Results: The results showed improvement of self-awareness about human evolution (3.67 to 3.85, Likert scale) and human aging (3.97 to 4.23) before and after the visit. Satisfaction survey showed 78.8% for human evolution and 86.5% for human aging. The overall satisfaction score for the visit was 82.1%.

Discussion and Conclusions: The tour of the medical humanities museum plays a novel role in medical humanities education. It can stimulate the students’ awareness of humanities and promote their qualities of humanism through the museum visit, role presentation and critical discussion.

Take-home messages: What is the potential role of medical humanities museum to the medical humanities education?
3EE15 (22342)
Teaching reflection, like dark clouds on summer day, can Haiku assist? How poetry affects the quality of undergraduate reflective writing

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Background: During a compulsory one week undergraduate teaching skills course, students are asked to reflect on an episode/thought that has impacted on them using a ‘what – so what – now what’ model. Engagement with this task was initially poor because it was perceived as boring and of limited utility but improved when a choice of creative modalities were proposed to express ‘What’ e.g. poetry, photography, art work.

Summary of Work: To evaluate and improve our teaching we have analysed student reflections using an ISCE framework (information, self-awareness, critical analysis, evidence of learning). Each domain was independently assessed by both authors and consensus reached by discussion. Quality of reflection was compared in 3 student cohorts between the two most frequent formats, prose (n=27) and haiku poetry (n=21).

Summary of Results: Overall quality was similar with both modalities but students submitting haiku were more likely to express thoughts and feelings clearly (17/21, 81% haiku versus 13/27, 48% prose) and to allude to their feelings (15/21, 71% haiku versus 7/27, 26% prose). Conversely students submitting haiku were less likely to comment on feelings of others or provide a clear plan for future learning.

Discussion and Conclusions: Increased expression of feelings with haiku may reflect the preferences/talents of students who choose to write them; alternatively the inherent restriction of syllables and mathematical approach to expression may be encouraging students to reflect more deeply on their feelings. We need to ensure our teaching leads to consideration of all aspects of reflection regardless of modality of expression.

3EE16 (22652)
A study to explore the nature of self-reflective essays from a course on Narrative Medicine

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Background: Medicine practiced with narrative competence may provide a better understanding the complex interactions among doctors, patients, colleagues, and the public (Charon, 2001). The study and practice of Narrative Medicine (Charon, 2006) provides insight into the human condition, suffering, personhood, our responsibility to each other, and offers a historical perspective on medical practice. In particular, attention self-reflection through writing nurtures skills of observation, analysis, empathy, and self-reflection – skills that are essential for humane medical care.

Summary of Work: This paper examines 30 essays written by students illustrating their self-reflective practice. These essays were collected as a part of a course in Narrative Medicine taught over the last three years. The Institutional Review Board has reviewed this study. Methods of analysis include qualitative content analysis to find themes across essays.

Summary of Results: Results show that students write about personal and professional issues. They use a standard essay format to convey these experiences. The essays include positive and negative experiences. Most students include global explanatory statements (Peterson & Seligman, 1987) to indicate their positive, negative, and hopeful and fearful stance towards their future as clinical professionals.

Discussion and Conclusions: The teaching of this course on narrative medicine has revealed that students are able to learn and share about their lives with their fellow students in a supportive environment. Writing over the course of a semester provides an opportunity to create a personal practice in self-reflection.

Take-home messages: These findings have implications for how medicine practiced with narrative competence is a model for humane and effective medical care.
3EE17 (22307)
Teaching professionalism through the language course for medical students: A study on using Humanities to teach values and develop medical students' professional skills

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Background: The past decades have seen a considerable growth in the medical humanities as universities strive to dissolve perceived barriers between subject areas, and medical educators seek ways of addressing human values in biomedical practices. This study investigated if issues of medical professionalism can be addressed in a General Education setting integrated with the humanities and PBL for medical students.

Summary of Work: The study, conducted in 2012-13, recruited a sample of 60 first-year Taiwanese medical students who took an English reading course. Topics such as Tradition and Values, Medicine, Life and Ethics were carefully designed, and materials such as short stories, painting were included. Each topic includes a PBL section intended to instigate the development of professional values in the students. Qualitative data based on PBL observations, student reflections, participant observations from other students, and interviews with students were collected and analyzed using Grounded Theory.

Summary of Results: The findings of data showed that students demonstrated improvement in: 1. observational and analytical skills, 2. critical reflection, 3. linguistic skills, and 4. awareness of professional values.

Discussion and Conclusions: The use of humanities can prompt medical students to engage in reflection of their profession, their identity and the very ethos that guides their education. By integrating humanities into PBL, students also developed observational and critical thinking ability required for their future profession.

Take-home messages: The results of this research demonstrated that humanities can serve as an invaluable resource in general education courses for medical education, combining opportunities for meaningful subject engagement and exploration of values and attitudes relevant to developing their professional identity as health providers.

3EE18 (23054)
Learning the humanization of medicine in the real world of biopsychosocial vulnerability

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Background: An effective pedagogical strategy to sensitize students to the humanization of medicine in their medical education need to create practical and theoretical opportunities for reflecting on the dimensions of the human person.

Summary of Work: Integrating the lectures of a discipline of introduction to medicine 318 first-year medical students organized in groups visited two institutions (55 groups and 51 institutions), which provide support to vulnerable people, and shared their experiences in a seminar with others groups that visited different institutions. Thereafter, each student individually interviewed a person from these institutions. At the end of the discipline 291 students evaluated the importance and the degree of awareness provided by contacting with the real world of biopsychosocial vulnerability for the humanization of medicine, rating a 5-point Likert scale (1-not at all, 5-very much) questions.

Summary of Results: Students considered important the contact with real persons during the visits to institutions (M = 4.6) and in the interviews (M = 3.8), as well as sharing experiences in the seminar. The visits to institutions raised awareness for social vulnerability (M = 4.4) and the individual interviews provided an opportunity to practice communication skills (M = 4.1).

Discussion and Conclusions: Students appreciated the contact with real persons as an educational strategy to teaching the dimensions of the human person, including aspects related with social vulnerability and exclusion.

Take-home messages: Learning in community promoted a better integration of theory and practice in teaching the humanization of medicine.
Students’ perception on observational skills training in medical education: the role of fine art paintings

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Background: Observation is one of the important capabilities in a clinician. Learning how to observe is, however, a challenging process. The systematic observation of paintings is one means to enhance medical students’ observational skills. Our aim were to capture students’ perception regarding the use of visual arts in the observational skills’ learning process.

Summary of Work: One hundred and five students from the first year of medical school underwent two activities that occurred within the discipline of medical skills, where they were encouraged to think and understand the possible physical and environmental characteristics of individuals represented in art paintings. After a week, they answered a questionnaire about their perceptions around the impact of art paintings in their observational skills’ learning process.

Summary of Results: 99% of students agreed that observational skills is essential to medical practice and 95% that help to find clues that improve the ability to infer the physiological/pathophysiological state of patients. Regarding the use of paintings, the majority of students considered that art can assist in medical learning (85%), is useful for the development of observational skills (93%), can be beneficial for future medical practice (89%), can help improving the diagnostic capacity (80%), can help improving the perception of the patient’s living environment (77%), influenced the way they look at things (80%), was enjoyable (84%), would like to use again (80%), and should be incorporated into the curriculum (72%).

Discussion and Conclusions: Students have positive perceptions about the use of art paintings for the development of observational skills.

Take-home messages: Students see art paintings as a powerful tool for the development of observational skills.

Persistence of attitude of graduated doctor after humanity in medicine teaching: A follow-up study

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Background: KKMEC has been teaching humanity in medicine by a transformative learning approach for 6th year medical student since 2006. The students joined four to six three-hour activities throughout each academic year and overall response show 90% was changed their attitude of patient caring by this activities. The follow-up study aim to prove the persistence of attitude change after graduation.

Summary of Work: Visiting of all graduated doctors among 2010, 2012 at district hospital was done (N = 96). Self-administration questionnaire about attitude with humanity in medicine was created and completed by each doctor. Results reported by descriptive and content analysis.

Summary of Results: Eighty eight percents of doctors reflected that the activities were highly useful for their practice. They also reflected that teaching had affect on how kindness of caring the patient, good relationship with patient, pride on being doctor, voluntary manner, and happiness of working in rural hospital (high rating with 95%, 93%, 92%, 92% and 90% respectively). Qualitative analysis of free writing comments showed that 30% of them reflected about changing their attitude with patient care but didn’t report how they practice, 25% reported that they do holistic care better, and only 10% said what they’ve learned was useless and couldn’t apply with their practice.

Discussion and Conclusions: Humanity in medicine teaching by transformative learning activities had persistence effect on attitude of caring patient of most students even 2 years after graduation.

Take-home messages: Teaching humanity in medicine effected on good attitude of being a doctor and how student caring the patient, and transformative learning could be persistence.
Perceptions of fifth-year medical students on narrative medicine in clerkship of internal medicine

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Background: Narrative medicine is medicine performed with narrative skill and was offered as a model for humanism and effective medical practice. The aim of our study is to determine the perception of narrative medicine in fifth-year medical students.

Summary of Work: Two hundred medical students were enrolled in a thirteen-week clerkship of internal medicine during the 2012–2013 academic year. There were 6-8 students with each clinical teacher, reading the narrative writing with feedback and reflection during one-hour small group discussion. Student’s perceptions of the narrative medicine experience also were determined by a 10-question survey with a 5-point Likert scale.

Summary of Results: The survey response rate was 86.6 % (200/231). Students’ responses to 5 items addressing student perceptions of the narrative medicine yielded a larger reliability (Cronbach alpha=0.930). Students’ perceptions about the narrative medicine were favorable for agreement (strongly agree and agree) in the enhancement of reflection (85.5%), empathy (78.5%), and relationship between patients and doctors (72.5%), but less favorable agreement in relieving pressure during medical care (34.0%) and keeping writing motivation (37.5%).

Discussion and Conclusions: Perceptions of medical students on narrative medicine were more favorable in the enhancement of reflection, empathy, and relationship between patients and doctors, but less in keeping writing motivation. It deserves to develop a strategy to promote narrative writing in early pre-doctoral medical education for enhancing reflection and empathy.

Take-home messages: Students’ perceptions on narrative medicine were more favorable in reflection and empathy, but less in motivation of keeping narrative writing.