8CC  Posters: Humanities/Empathy

#8CC01 (135974)
Medical humanity, too young to learn? — Interactive medical humanity case-study class for year 1 medical students
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Background: Competency in medical humanity is crucial for students to develop high quality ability of interpersonal skills and communication. In the traditional medical curriculum for 6-year program, Year 1 students are graduates of high school and starters in learning basic core university liberal arts contents. They have almost no experiences in clinical encounters, and are thought not ready to discuss clinical cases with hospital context.

Summary of Work: We report on our preliminary experiences to use interactive case-study method in learning of medical humanity for the young medical students. The course started with 8 core lectures covering different aspects of humanity, and followed by one field trip to hospital to observe the work of physicians, nursing staff and personnel of the other disciplines. The later half of the course is consisted of 5 interactive case-study using scenarios of hospital context. The case triggers are dispatched to students sequentially along the discussion. The teacher plays the role to lead the case-study, and, when necessary, to give 1-min explanation to medical term, specific disease, or clinical context when necessary. In some case-study discussion, we allow to include some senior medical students in the class.

Summary of Results: The students felt the course interesting and had little barrier in learning the objectives of medical humanity through using hospital context even though they had no prior knowledge of clinical contents or experiences in hospital. The senior medical students felt it also feasible for them, and found no difficulty to discuss with young students with no prior clinical rotation experiences. The course has been ranked one of the 2 most popular courses in the university according to students' feedback.

Discussion: Having background knowledge of clinical and hospital setting is helpful, but this should not be a barrier to young students.

Conclusion: Learning concept and philosophy of humanity should have no limitation in learners’ age.

Take Home Messages: Year 1 students are not too young to learn medical humanity course if the course is given in a student-centered way. Interactive case-study is a feasible choice.

#8CC02 (135969)
Using reflection & digital stories to counteract the culture of overuse in medicine and enhance the patient/provider relationship
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Background: The Lown Institute is a grass roots organization whose vision includes that patients are safe from unnecessary diagnosis, treatment, and harm, and where patient’s wishes are respected by their caregivers (RightCare). The Department of Pediatrics incorporates narrative and/or digital story telling in resident curriculum to engage learners in reflective practice around the humanistic components of patient care.

Summary of Work: Four EPAC (Education in Pediatrics Across the Continuum) students and 2 residents created single-photo digital stories that depict patient experiences that illustrate problems of overuse in medicine and how “RightCare” approaches in the context of strong patient/physician relationships can make a positive impact for patients and families. Subjects participated in small group discussions and self-directed learning focused on: A) The prevailing culture of overuse in medicine, B) What “RightCare” means, and C) The relationship between compassion, communication, the patient/physician relationship and shared decision-making for “RightCare” in healthcare. These subjects then created a single digital story during a three-hour digital storytelling workshop facilitated by the Center for Digital Storytelling.

Summary of Results: Six digital stories were shown during “Pediatric Movie Night” at Children's Hospital Colorado to an audience of 48 faculty, residents, students, and staff. Story themes included: Possible overuse, underuse, and misuse (often ambiguous) of medicine (5/6 stories); a bond made between clinician and patient or patient’s family (4/6); possible absence of connection between provider and patient (3/6); an event that triggered a reaction/emotion within the provider (6/6); provider empowerment (recognition that they can have a positive impact on patient care) (5/6).

Discussion: Qualitative analysis of themes of the stories showed reflection on interactions with RightCare led to a preponderance of provider self-awareness, which included an evoked reaction/emotion within the provider and a sense of empowerment.

Conclusion: Self-reflection using digital stories leads to a process of self-awareness. After initial purchase of tools and expertise to build stories, it is a sustainable process that may effectively lead to changes in behavior. We will conduct focus groups and follow up surveys with audience members to this end.
Take Home Messages: Digital stories around RightCare lead to an increase in provider self-awareness, which often includes a sense of empowerment.

#8CC03 (135407) How are The Tutorial Scenarios of Problem-based Learning Reflecting the Bioethics Humanities' Attitude?

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Background: An understanding of bioethics and medical humanities is an absolute provision that should be known by medical students to make and conduct a proper decision. One of the competency of ethics is taking ethical decisions. However, student still encountered difficulties to do it. These may caused by that competency has not been taught and practised in each scenarios. This condition make the students was not skilled enough for determining ethical decisions because they were not accustomed to take it. Study on learning of bioethics is still limited in Indonesia. Starting from these problems, the authors want to analyze the tutorial scenario in reflecting an attitude of bioethics and humanities.

Summary of Work: The study was a qualitative study. It used content analysis techniques to examine the 74 tutorial scenarios from 25 blocks at Medical Faculty UNS.

Summary of Results: From all scenarios, the sense of bioethics and humanities attitude was found implicitly. Only in one block, that was Bioethics block, which told that competency explicitly. The second is the tutor could not lead the student in practising to make decision. Because of those, the student would be more difficult to understand how to decide a proper attitude ethical decision.

Discussion: The minimal reflections of bioethic and humanities competency could result directly to the students. First, the learning objective of the scenario did not contribute bioethic and humanities topic. The second is the tutor could not lead the student in practising to make decision. Because of those, the student would be more difficult to understand how to decide a proper attitude ethical decision.

Conclusion: Though the reflection of attitude bioethics and humanities were not optimal in tutorial activity, the existing scenarios have been reflected that competency implicitly and explicitly.

Take Home Messages: All scenarios should contain the topic of bioethics and humanities to be their learning objective. Tutor need to encourage the student in order to make them familiar with ethical attitude and decision.

#8CC04 (132790) Western and Chinese medicine students’ differing perceptions of narrative medicine during an internal medicine clerkship

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Background: While Western medicine is an evidence-based science, Chinese medicine is more of a healing art. Narrative medicine is offered as a model for humanism and effective medical practice. We aimed to compare the perceptions of the narrative medicine in internal medicine clerkship between fifth-year medical students (MSs) from the School of Medicine (learning Western medicine) and those of traditional Chinese medical students (TCMSs) from the School of Traditional Chinese Medicine.

Summary of Work: 465 MSs and TCMSs medical students participated in a four-activity narrative medicine program during a thirteen-week clerkship in internal medicine during the 2012–2014 academic years. Students’ perceptions of their narrative medicine experience were determined by a questionnaire (10-items, using a 5-point Likert scale). Exploratory factor analysis was conducted. A total of n=412 (88.6%) fifth-year medical students participated in the study: n=270 (65.5%) MSs and n=142 (34.5%) TCMSs.

Summary of Results: Students’ responses to the 10-question survey yielded a high reliability (Cronbach alpha=0.943). Factor analysis identified 3 factors: (1) personal attitude; (2) self-development/reflection; and (3) clinical benefit. Both student groups reported high levels of agreement on the enhancement of self-development/reflection (74.6%), but TCMS students reported significantly higher levels of agreement than MS students across all 3 factors.

Discussion: Both groups of students reported an enhancement of their self-development and reflection during a 4-activity narrative medicine program. However, perceptions of the narrative medicine course were more favorable in the TCMS group than in the MS group.

Conclusion: Given the different learning cultures of medical education in which these groups engage, this suggests that undertaking course in Chinese medicine might actually enhance one’s acceptance to, and benefit from, a medical humanities course. Alternatively, Chinese medicine might attract more humanities-focused students.

Take Home Messages: The benefit derived from a medical humanities course differs across Western and Chinese medicine contexts.
Are medical humanities relevant to medical students in anaesthesia?

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Background: The value of humanities may not be immediately apparent to those focused on the medical sciences. Medical humanities offer a range of learning opportunities, complementing the sciences to enhance medical education. This study examines whether the humanities enrich learning during an undergraduate anaesthetic placement. 1. Lake et al. A fresh perspective on medical education: the lens of the arts. Medical education 2015; 49: 759-772

Summary of Work: 26 third year medical students completed a questionnaire following a two-week placement in anaesthetics. Students had previously completed a compulsory humanities project. Inductive thematic analysis was carried-out on qualitative data by two independent assessors, before combining results to find common themes.

Summary of Results: 69% reported no experience of the humanities within their medical education. 80% considered studying humanities beneficial, through:
- Increased personal insight
- A ‘rounded’ education
- Improved care and compassion for the patient and society
34% responded that humanities were significant to anaesthesia.

Discussion: A holistic approach to medicine and a greater understanding of the patients’ perspective were common themes; respondents considered an understanding of humanities afforded the ability to ‘think deeper’, allowing greater insight to one’s skills and abilities as a doctor. Students reported that spirituality and philosophy were relevant factors to anaesthesia, in particular the unconscious mind. This is especially interesting as it is a complex topic that is difficult to explore using solely the sciences.

Conclusion: An understanding and appreciation of the humanities enhances medical education. Undergraduates report personal and professional maturation through deeper personal insight and greater understanding of the ‘human experience’ of illness. This is the first study to suggest enhanced learning in undergraduate anaesthesia through incorporation of the humanities.

Take Home Messages: The medical humanities are an important facet of the undergraduate curriculum; they may be particularly beneficial in developing non-technical skills in medical students during an anaesthetics placement.

Visiting tour of medical humanities museum for the promotion of medical humanities empathy

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Background: Studies of medical education curriculum related to medical humanities museum were limited. This study is to explore the innovative educational role in empathy through medical humanities museum touring.

Summary of Work: We arranged clerks, interns and PGYs in our hospital to visit the Museum of Medical Humanities of National Taiwan University. Participants were arranged to attend two 90-minute medical humanities courses. One course was “topic exhibitions in touring experiences”. Participants practiced appreciation ability and self-reflection under the guided tour including Taiwan medical histories, sculptures & paintings, and group discussions. The other was “humanities issues in clinical scenarios”. Participants learned observational skills and empathy through case simulations including role-playing and case discussions. The Jefferson Scale of Empathy (JSE) was evaluated before and after the touring.

Summary of Results: Our pilot study (from Aug. 2014 to Jul. 2015) showed that the participants (n=146) performed significantly higher in empathy scores after the touring. Thus, in this study (from Aug. 2015 to Jan. 2016), we continued to explore the empathy performance in depth. Totally 42 new participants were enrolled; 29 (69.0%) males and 13 (31.0%) females. There were 21 (50.0%) clerks, 11 (26.2%) interns, and 10 (23.8%) PGYs. The JSE difference before and after the curriculum was 1.3±5.3. The overall course satisfaction was 4.3±0.7.

Discussion: In this study, participants did not show significant change in JSE after the course. It might because that the sample size was too small and the answering time for JSE during the course was not enough. Nevertheless, in the overall survey, most participants showed positive feedback and were satisfied with course designs and teacher’s competencies.

Conclusion: Medical humanities museum touring differs from in-class courses. Participants would be influenced imperceptibly through medical humanities museum touring.

Take Home Messages: Can medical humanities museum touring enhance empathy of young medical participants?
Experience of bio-social topic division in clinical case conference

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Discussion: Bio-psycho-social-spirit holistic health is an important issue on medical education. It is also the goal of clinical humanity. Most medical students take the humanity course on the first two years, but rarely has the opportunity when they practice in the hospital. Frequently, it is difficult to join the humanity discussion in clinical cases. Here we share our experience of bio-social topic division in student case conference.

Summary of Work: Scenario: A 27-year-old male, had the past history of mania-depression disease. He is a gay and attempted suicide several times since senior high school. He had two sisters but the relationship was not good, and quarrel with them frequently. His condition got worsen and began to have audio hallucination for one week. He grabbed her mother with his hands this morning. He was taken to hospital with ambulance under police guarded, entered the emergency room and registration. However, he ran away and escaped during waiting for psychiatric consultation two hours after registration. His parent call for help but the hospital security guard ignored. Unfortunately, he was taken to our ES again due to drowning one hour later, diving suicide from a bridge. Out hospital cardiac arrest was noted but regained vital sign after resuscitation. Quadriplegia was found when he was clear. A cervical spine plain film showed C5 burst fracture. He received mega-dose solu-medrol infusion and underwent cervical spine surgery, then stayed at intensive care unit for pneumonia. Tracheostomy was suggested two weeks later but he refused. His muscle power did not recover and his family signed “do no resuscitation” consent sheet. What should we do for him next step?

Summary of Results: Students are divided to 5 groups to find the problems in the scenario divided as bellowing topic: 1. Medical law 2. Clinical Ethics 3. Quality of health care 4. Evidence base medicine 5. Community health and gender issue

Discussion: Students are divided to 5 groups to find the problems in the scenario divided as bellowing: 1. Medical law; 2. Clinical Ethics; 3. Quality of health care; 4. Evidence base medicine; 5. Community health and gender issue

Conclusion: Bio-social topic division is a good method in clinical case conference. The students feel both disease and psychosocial topics are equally important. It is beneficial to establish the ability of bio-psycho-social-spirit holistic health care for medical students.

Take Home Messages: We should found humanity topic in each clinical conference patient. The discussion is equal important in both disease and humanity topic.

Integration of e-learning in a medical humanities course: an evaluation study

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Background: This study aims to evaluate medical students’ perceptions of e-learning modules to promote active learning in a medical humanities course.

Summary of Work: Four e-learning modules on medical ethics were developed to support student learning in a medical humanities course for 2nd year students in the six-year undergraduate medical program at Yeungnam Medical School in Korea. Students studied topics using these e-learning modules, which were designed using a goal-based scenarios model, in preparation for active learning (i.e. debates) in the class. A 14-item questionnaire was implemented to two cohorts of students during 2014-15 at the end of semester. Additionally, 4 students participated in a focus group interview. Survey data were analyzed using factor analysis and a thematic analysis was performed of qualitative data.

Summary of Results: 94 students completed the questionnaires (94% response rate). Two factors were identified with eigenvalue greater than 1: (1) the learning activities in the e-learning modules were useful, (2) learning resources and the structure of this module was helpful for self-study. In particular, interview data revealed participants’ perceptions that learning resources in the e-learning modules helped them prepared for debates in the face-to-face class sessions. Additionally, interview participants indicated that their engagement with e-learning modules was affected by how relevant the subjects were to them and the amount of learning resources embedded in the modules.

Discussion: Integration of e-learning can be effective in supporting active learning in medical humanities courses. Yet, student’s perceived engagement in e-learning differed according to the relevance of the topics and the amount of learning resources embedded in the module.

Conclusion: Careful selection of learning resources to promote students’ interest in the topics and lessen their cognitive load is needed to enhance students’ engagement in e-learning.

Take Home Messages: Integrating e-learning modules is effective in supporting active learning and offering quality learning resources is key for student engagement in e-learning.
#8CC09 (132641)
**Evolution of students' empathy during medical studies and association with students' characteristics**

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**Background:** Empathy is an essential competence for clinical practice. We investigated whether empathy scores changed from the 1st to the 4th year of medical studies and associations of empathy with students' personal characteristics.

**Summary of Work:** 363 students from 1st and 4th year of medical studies completed two questionnaires, the Jefferson Scale of Empathy (JSE) and the Empathy Quotient (EQ), as well as standardized questionnaires assessing personality (Big Five NEO), learning approaches (SPQ) and stress coping (CISS). Analyses used unpaired t tests, ANOVA, multivariate linear regressions and Pearson's correlations, further stratifying by sex.

**Summary of Results:** An increase of JSE scores (111.4±9.2 vs. 114.6±10.4; p=0.03) and a decrease in EQ scores (47.2±9.0 vs. 44.2±9.8; p=0.03) were observed over time. Stratification by sex showed similar JSE results comparing 1st and 4th years for women (113.6±8.0 vs. 116.4±9.5; p=0.03), respectively) and men (108.1±9.9 vs. 111.9±11.1; p=0.04). EQ scores remained relatively stable over time in women (53.4±5.8 vs. 47.0±9.6; p=0.12), but reduced significantly in men (44.4±9.9 vs. 40.3±8.9; p=0.02). Associations of these results with personal characteristics will be presented.

**Discussion:** While JSE scores increased throughout studies, EQ scores declined over time. The latter was particularly true for men students, but not women.

**Conclusion:** Contrasted findings were observed between empathy measures.

**Take Home Messages:** Empathy is steadily valued by medical students, but empathy capacity seems to attenuate with progression of studies.

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#8CC10 (134471)
**Increasing in burnout but stable empathy while increasing clinical experience among young clinical trainees in Taiwan**

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**Background:** Empathy is one of key ability for patient care. Understanding the empathy change helps to develop empathy-promoting strategy. Our previous study reported a special finding that medical students might have transient empathy decline during the internship. The reason remains unclear. Burnout is common among young clinical trainees and related with the medical error, depression, poor empathy and unprofessional behavior. The study aims to evaluate the association of empathy and burnout among clinical medical students and PGY trainees.

**Summary of Work:** All clinical medical students and postgraduate year one (PGY1) trainees from a single medical center (VGHTPE) in Taiwan were invited to join this study in Dec. 2015. Empathy perception was evaluated by Chinese Healthcare Providers Version of Jefferson Scale of Empathy (JSPE) and the extent of burnout was evaluated by Maslach Burnout Inventory. The correlation between burnout score and empathy was examined and the association of the empathy and burnout with grade change was analyzed.

**Summary of Results:** The mean JSPE scores of clerks(n=73), interns(n=45) and PGY1(n=28) trainee were 107.0, 108.1 and 107.1 respectively and have no statistical difference. Female had higher empathy perception than male (108.5 vs. 106.7). The proportion of burnout increases with clinical years. 41.9% of clerks, 56.1% of interns and 80.0% of PGY1 reached the threshold of burnout. Individually, empathy perception has a negative correlation with burnout (r= -0.42 for depersonalization and -0.33 for emotional exhaustion). As the clinical experience increasing, the increasing overall burnout level did not have a negative effect on empathy (r= 0.225 and 0.342).

The empathy perception during the early clinical years is stable in this study although the burnout rate is high and marked increasing with clinical experience. Burnout may have negative effect on empathy individually. But the increasing overall burnout may be not the only answer for empathy decline with clinical year in some studies. The trend of empathy change during training years may be not the same among the countries and generation. Besides, the medical educators should make more effort to prevent burnout.

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**Take Home Messages:** 1. Burnout proportion is still very high among clinical trainee. 2. Burnout have negative effect on empathy individually. 3. The empathy change during training years varied among the countries and generation.


#8CC11 (133666)
“To be or not to be”: learning the art of being in another person’s shoes through theater improvisation

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**Background:** Medicine has a consolidated approach to diagnostic assessment. However, physicians need to interact meaningfully with their patients, responding accordingly to verbal and nonverbal cues. In this context, improvisation is mandatory, as well as focusing on the other and communication skills. Although new in medicine, improvisation is well established in Theater, with concepts that are learned and trained, such as scenic intelligence. It may have a distinctive relevance in medicine, being one’s ability to act and observe oneself at the same time, allowing adjustments in real time to guarantee the success of the scene or consultation.

**Summary of Work:** Second year medical students attended a curricular rotation based on Theater, mainly focused on improvisation. It comprises five meetings and a 20-hour workload. Each meeting has a stepwise approach to improvisation, following a sequence of activities with increasing complexity: 1) Physician-patient communication; 2) Unplanned improvisation games; 3) Planned improvisation games; and 4) Debate on improvisation scenes prepared by students. After each meeting, students conducted interviews with patients and wrote creative narratives inspired in works of art.

**Summary of Results:** Answering an anonymous questionnaire, 97% of students were positively involved with the activity. They reported being better prepared to establish links with patients and classmates. More than 90% think they will use what they learned at their professional and personal lives. There was a significant increase in empathy levels after the rotation in Jefferson Scale of Physician Empathy (120-123*) and Interpersonal Reactivity Index (68-71*), *p<0.001.

**Discussion:** Adapting theater improvisation techniques to the context of medical education seems to help students to become more comfortable, increasing their confidence and ability to put themselves in another person’s shoes.

**Conclusion:** Theater improvisation may have a role in medical education, especially when dealing with empathy in the physician-patient relationship.

**Take Home Messages:** Theater activities based on improvisation techniques may increase medical students’ empathy levels.

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#8CC12 (135910)
A Cross-sectional Study on Empathy Among Pre-clinical Medical Students: The Saudi Arabian Perspective

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**Background:** Physicians demonstrate empathy by openly appreciating patients’ predicament in terms of affect. Despite the fact that empathy is of significant importance, cross-sectional as well as longitudinal studies show a decline in empathy as students approach graduation.

**Summary of Work:** An observational cross-sectional study was carried out at AlFaisal University on 375 students in their pre-clinical years using the Toronto Empathy Scale. We also included a few survey questions on personal experience in regards to having a patient in the family. Other questions related to demographics, the choice of medicine as a career and future goals and priorities were also included.

**Summary of Results:** Females showed to be more empathetic than males (p value = 0.001), with a sudden drop of empathy in the two sexes between years 2 and 3. The reason for choosing the medical path had a higher association with empathy affecting more than five categories (p value = 0.001) when compared to the experience of a loss, which only related to one category of empathy (p value = 0.003).

**Discussion:** Although many publications have discussed the decline in empathy among medical students, but non-have discussed it in a conservative environment such as KSA. In similarity with other publications, females showed more empathy than males and that empathy decreases as students become more senior. Unlike other publications that described a constant linear decrease, our study showed a sharp drop when students are exposed to pathology (year 2).

**Conclusion:** Empathy can be affected by sex, level of education, losses in the family and students’ priorities in life. Furthermore, we believe that the gender segregation culture might affect empathy.

**Take Home Messages:** Medical students show loss in empathy as they proceed through medical school, so medical educators should target increasing students empathy levels. Our study pinpoints several factors that affect empathy and could be of help in increasing empathy.
Background: Empathy is one of the main characteristics that medical doctors should develop. Most studies show a decline in empathy scores as time passes by.

Summary of Work: Objective: Compare empathy scores for medical students during a four year follow up. A cohort study with 33 students (18 men and 14 women) was performed. The Jefferson Empathy Scale, was used to obtain baseline data, at the beginning of the third year; and for follow up at the end of third, fourth, fifth and sixth years. Cronbach Alpha, Pearson Correlation, t Student test, were used for statistic analysis. Informed consent was obtained.

Summary of Results: Cronbach alpha = 0.8. No significant differences were observed across years and gender for global empathy, perspective taking, and standing in patient's shoes; except for compassionate care in female which shows a tendency to decrease (r=0.6, p<0.05).

Discussion: No decrease in empathy for any of the years studied was observed, as previous studies have shown. Possible explanations could be the homogeneous characteristics of the study group, and the small size of the groups during clinical rotations, which allows for personalized tutoring.

Conclusion: No significant changes in global empathy, in perspective taking, as well as in standing in the patient's shoes were observed. No significant differences in gender were observed either, except for compassionate care which in females decreases.

Take Home Messages: This cohort study should continue to keep observing the trends on empathetic behavior up to the end of the seventh year. A qualitative study should complement the data to provide for better understanding.

Background: Altruism, defined as an unselfish concern for the welfare of others, has been considered an inherent part of a doctor's profession. Recently, however, it has been suggested that modern medical practice has led to a decline in altruism among medical practitioners. In this study we measured the altruistic behavior among medical students.

Summary of Work: A cross-sectional study was conducted with 67 first year, 76 second year, and 52 third year medical students from the Faculty of Medicine at Vajira hospital, Navamindhadhiraj University, Thailand. The altruistic behavior was measured using the Altruistic Personality Scale previously developed by Rushton, Chrisjohn, and Fekken (1981). The scale consists of 20 measurement items with responses ranging from Never (0) to Very Often (4).

Summary of Results: The altruistic behavior score was found to be highest among second year students (62.02±8.53) while the lowest was recorded from third year student (55.13±8.71). First year student (60.74±8.91) demonstrated significantly (p<0.05) higher altruistic behavior than third year student but did not different from second year student. However, factors such as grade point average and gender were not significantly (p>0.05) associated with altruistic behavior score.

Discussion: This study showed that altruistic behavior score among medical students decreased by the increase in their educational years, as the first and second year students had the higher altruistic behavior score than third year student. It means that altruism reduces with higher educational levels among medical students.

Conclusion: In general, medical students in faculty of Medicine Vajira hospital had low altruistic behavior level and the amount of altruistic behavior reduces with increase in their age and educational level. These may be a cause for concern; as such we suggest a possible inclusion of courses on altruism in the curriculum.

Take Home Messages: It is recommended that we should become more involved in the design of curriculum that encourages future medical students to pay more attention on the importance of altruism.
Empathy evolution in Spanish medical students: a cross-sectional study in 2 Spanish medical schools

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Background: Previous studies in different cultural contexts show contradictory results concerning the evolution of empathy of undergraduate medical studies. The Jefferson Scale of Empathy (JSE-S) is one of the most commonly used self-report measures of empathy proving to be valid and reliable across multiple countries and languages, including one translation developed in Mexico. The aim of the work has been to investigate the evolution of the attitude towards empathy in Spanish medical students.

Summary of Work: This was a cross-sectional study using the Spanish version of the JSE-S, which has been previously adapted and validated. 1104 medical students (74% of students) from the 1st to the 6th year of two Catalan Universities (Barcelona UB n=889, a public university) and International of Catalonia UIC: n=415, a private university) answered the questionnaire. Students were asked about the preferred speciality. The gender proportion was 32% male and 68% female.

Summary of Results: Significant higher scores were observed in women. There were no statistically significant differences between schools in the average empathy scores. The year of medical training had a statistically significant effect on empathy with students attending the 5th year reporting lower empathy than those attending the 2nd and 6th. Yet differences were small, due to the small effect size found. Students preferring surgery report lower empathy than those preferring medical and medical-surgical specialties.

Discussion: This study reproduced the higher empathy scores of female students and lower scores of students interested in surgical specialties. Our findings suggest that the JSE-S scores for Spanish students in different years were comparable, and agree with previous studies that revealed stability of empathy. Studies involving more medical schools and following a longitudinal design are needed to evaluate whether there is score stability within the same student cohorts over time.

Conclusion: The empathic orientation remains stable in Spanish medical students along the medical degree in the two Medical schools considered in the Spanish cultural context.

Take Home Messages: Empathic orientation in medical students can vary depending on the cultural context. Empathic orientation in Spanish medical students seems to remain stable along the medical degree.

How do students learn empathy? The adventure and exploration in empathy-promoting activities

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Background: Empathy underlies one of the key professionalism goals of medical education. Various exercises and activities have been introduced to promote empathy and other humanistic values, yet it is not clear how students learn empathy in these activities.

Summary of Work: Two empathy learning activities – “Disease Lottery” and film discussion groups were implemented in the “Life and Death” course. In “Disease Lottery”, forty-four 4th year medical students drew lots to “obtain” a disease in the beginning of the semester. Students learned to enter into the patient’s world via interviewing the patient, imagining themselves as the patient, and then giving a presentation in a first-person narrative at the end of the semester. In film discussion groups, 6-8 students discussed in groups about how characters in the movie may think and feel after watching the movie.

Summary of Results: The authors interviewed these students, analyzed the audio records, and identified students’ empathy learning responses in these activities. Preliminary data suggested that students find these activities useful, and their empathy learning was triggered from the following three kinds of sources: peer interaction, the rich context of disease, the personal experience brought out by these activities, and the connection between students and the target patient. More detailed results will be provided in this presentation.

Discussion: Understanding about the sources to trigger empathy learning is important to enhance students’ empathy in medical education. Findings from this study may serve as a resource for educators to enhance teaching effectiveness.

Conclusion: Empathy learning is a complex process with many factors involved to determine the outcome.

Take Home Messages: The further understanding from this study about how students learn from empathy-promoting activities may help educators enhance teaching effectiveness.
Is adult attachment style associated to empathy? A study on a sample of Italian medical students

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Background: Attachment literature recognizes two dimensions of attachment reflecting comfort with closeness and anxiety over relationships (Feeney et al., 1994). Individuals may display high or low comfort and high or low anxiety; hence, these two dimensions define four attachment styles labeled secure, fearful, preoccupied, and dismissing (Bartholomew & Horowitz, 1991). Central notion is that empathy is nurtured in the early rearing environment in relation to the quality of the early attachment relationships with a primary caregiver (Henderson, 1974).

Summary of Work: The issue investigated in the present study is the relationship between attachment styles and medical empathy. A sample of 286 Italian university students (140 females) is included in the study. All participants completed the Attachment Style Questionnaire (ASQ; Feeney et al., 1994), the Interpersonal Reactivity Index (IRI; Davis, 1983) and the Jefferson Scale of Physician Empathy – Student Version (JSPE-S; Hojat et al., 2002).

Summary of Results: Secure and insecure attachment have significant positive and negative correlation with global empathy measures. Regression analysis shows that secure attachment predicts about 15 percent of the variance in empathy variables. Gender effect is evaluated showing moderate effects on some empathy sub-scales.

Discussion: Attachment style is one of the most important personality dimensions affecting interpersonal sensitivity and must be considered as a key variable in medical education to be adequately addressed for the relation with empathy and empathic behavior.

Conclusion: Individual with secure attachment style develop a sense of trust with caregivers who respond to them empathically and therefore develop the capacity to respond sensitively and empathically toward others in later care relationships.

Take Home Messages: The matter is complex and many are the open questions: a) stability of the baseline attachment/empathy profile in the six years; b) possible correlation with students well-being; c) influence on clinical practice (e.g. patient-doctor communication); d) protection against burnout during and after the medical course.