

**AMEE**

**Abstract Book**

**2016–2024**

**Faculty of Medicine**

**Ramathibodi Hospital**

**Mahidol University**

**AMEE**

**2016**

#7GG07 (127962)

**National Survey of Canadian Pediatric Resident Continuity Clinic Coordinators**

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**Background:** Many postgraduate training programs have introduced continuity clinics in order to enhance exposure to ambulatory care and promote resident autonomy and responsibility for the longitudinal care of patients. Little is known about the type of continuity experiences provided to pediatric residents across Canadian pediatric residency training programs.

**Summary of Work:** All Royal College accredited pediatric residency training programs in Canada were invited to participate in the study. The study was administered through an online questionnaire that focused on clinic demographics and operations, including available resources, scheduling, supervision structure and assessment tools. Clinic successes and challenges were also elicited.

**Summary of Results:** Fifteen of 17 (88.2%) pediatric residency training programs provided responses. The majority (13/15, 86.7%) of programs included a continuity clinic-training component, though structure varied significantly. Approximately half (7/13, 53.8%) of the clinics focused on consultant pediatrics and had multiple referral sources. Standardized written evaluations (9/13, 69.2%) were used most frequently.

**Discussion:** Pediatric resident continuity clinics support development of Royal College of Physicians and Surgeons of Canada training requirements. Consistent with existing literature, continuity clinics are perceived to expose residents to problems unique to outpatient practice, allow for independent management decisions, and provide a forum for receipt of regular feedback on performance.

**Conclusion:** Continuity clinics are common within Canadian pediatric residency training programs. This formal evaluation of the type of continuity experiences provided to pediatric residents will provide an important background and basis for further research regarding the impact of such programs and encounters as well as their optimal delivery.

**Take Home Messages:** Though most Canadian pediatric training programs include continuity clinic exposures, there is a wide variation amongst individual programs in size, structure and evaluation format. Despite these differences, continuity clinics are thought to provide valuable exposure to outpatient pediatric problems, promote autonomy and allow for skill development through observation and feedback.

#7GG08 (133267)

**Pediatric residents' confidence and practice in adolescent health care, after mandatory adolescent medicine rotations in Thailand**

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**Background:** The adolescent medicine rotation was recently included as a mandatory part for pediatric resident training in Thailand for the class of 2013.

**Summary of Work:** To refine the curriculum, we explored pediatric residents' level of confidence and how frequently they provided aspects of care to adolescents by asking them to answer a self-administered questionnaire. This is a cross sectional study of 2 groups of pediatric residents, the former curriculum group (FCG) and the mandatory curriculum group (MCG). There were 91 participants (45 from 2012, 46 from 2015).

**Summary of Results:** The FCG more frequently felt "more confident" while more MCG providing health care "more frequently". Both had highest percent of feeling "more confident" in assessment of BMI and BP. The FCG had higher percent of feeling "more confident" on physical examination ( $p = 0.031$ ) and growth assessment ( $p = 0.040$ ). Both groups were most frequently provided care in assessment of growth, plotting growth chart and assessment of BP. Assessment for risk of cervical dysplasia was least carried out for both groups. The MCG reported a higher percent of doing the psychosocial assessment ( $p = 0.035$ ).

**Discussion:** The MCG had less confidence than the FCG, which may be due to increase self-awareness about the areas that they can develop.

**Conclusion:** The FCG reported higher levels of confidence than the MCG in most items, while the MCG reported more frequency in providing care. The MCG were more confident than the FCG on topics related to psychosocial issues. The MCG reported carrying out the psychosocial assessment more frequently than the FCG.

**Take Home Messages:** Pediatric residents reported providing care to adolescents more frequently than before. Exposure to more cases and enhancement of teaching formats by incorporating more to the adult learner is suggested.

#7HH11 (131749)

**Medical Students' Personality Type and the Association with Anxiety and Depression Symptoms**

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**Background:** Studies show high frequency of depression, anxiety, and stress among medical students. There are many factors associated with this mental problem. This study aims to determine a prevalence of depression and anxiety among medical students and an association between the levels of this problem and personality and other sources of stress.

**Summary of Work:** All the 5th year medical students from the Faculty of Medicine, Ramathibodi Hospital, Mahidol University were enrolled in this cross-sectional study. The Hospital Anxiety and Depression Scale (HADS) and the nine-type-Enneagram personality assessment were used to determine the level of anxiety and depression and personality type respectively.

**Summary of Results:** The response rate among the study subjects was 58% (n=112). The prevalence of anxiety and depression were 16% and 7%, respectively. The student's personality type were significantly associated with the anxiety (Chi-square=20.8, p<0.02) while mean HAD depression score in students with low-GPA were significantly higher than those with Moderate-GPA (F=3.55, p<0.05).

**Discussion:** This finding indicates that anxiety and depression may coexist with some personality types and academic achievement, respectively. Whereas anxiety is the feeling of internal worry about uncertain outcome, however, depression is rather the feeling of sad, loss from undoubted poor outcome. This different perception may result in different symptoms.

**Conclusion:** Symptoms of anxiety were associated with personality type and symptoms of depression were associated with academic achievement. Paying attention to these factors would help to identify and support the risk groups. Further study to enhance insights of the causes and improve quality of care for medical student should be done.

**Take Home Messages:** Symptoms of anxiety were associated with personality type and symptoms of depression were associated with student's GPA.

#7HH12 (126663)

**The Mediating Role of Basic Psychological Needs Satisfaction between Autonomy-Support and Self-determined Motivation in Dental Education**

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**Background:** Self-determination theory (SDT) postulates that teachers' autonomy-support, when mediated by students' perceptions of their basic psychological needs satisfaction (BPNS) of autonomy, competence and relatedness, is associated with increased levels of self-determined motivation. Therefore, our aim is to test the mediating role of BPNS between autonomy-support and motivation, in a dental student sample.

**Summary of Work:** We conducted a cross-sectional study collecting data on demographics, autonomy-support, perception of BPNS, and motivation, from 929 Chilean undergraduate dental students. Mediation of BPNS was tested based on the Preacher&Hayes approach and then integrated in a structured equation model, controlling for gender, age, and year of curriculum.

**Summary of Results:** There was a significant indirect effect of autonomy-support on self-determined motivation through BPNS (b=0.494, p=0.011, BCaCI[0.071, 0.889]), representing a small to medium effect-size (K2=0.042, BCaCI[0.007, 0.075]). The final model (Autonomy-Support → BPNS → Motivation[Controls]) fitted well the data and all regression weights reflected positive associations, with a stronger significant indirect path and a weaker non-significant direct path.

**Discussion:** Autonomy-support affects self-determined motivation of dental students through the mediation of BPNS. Consequently, it is not the intended effect of teachers' autonomy-support that impacts motivation, instead it is the impact it has on students' perception of BPNS that will have a positive or negative effect on their motivation.

**Conclusion:** This is the first study on the mediating role of BPNS between autonomy-support and dental students' motivation. For dental education, an autonomy-supportive environment that facilitates BPNS would lead students to engage and value academic activities, which is expected to contribute towards them becoming better practitioners and therefore to increase patient-safety.

**Take Home Messages:** Teachers' autonomy-support affects self-determined motivation of dental students through the mediating effect of BPNS. Therefore, the BPNS of autonomy, competence and relatedness should be considered when planning interventions to increase dental students' self-determined motivation, which in turn may improve educational outcomes and student-patient interaction.

**AMEE**

**2017**

#5GG09 (609)

**Medical Educational Climate and Paediatric Resident Burnout in Thailand**

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**Background:** Burnout is a condition that one experienced high emotional exhaustion, high depersonalisation and low personal accomplishment. This study was undertaken to investigate the frequency and level of burnout among paediatric residents and explore related factors. In addition, the medical educational environment could be improved to lower the risk of burnout.

**Summary of Work:** An exploratory sequential mixed method was employed for this cross-sectional study. Firstly, the quantitative phase used a close-ended questionnaire as the instrument. Regression analysis were used to identify the correlation. Secondly, targeted participants from the first phase were interviewed individually.

**Summary of Results:** 41 residents, none had a high level of burnout. The work related quality of life correlated with educational climate. Interviews six residents found correlation between burnout and the environment such as inappropriate tasks, teachers and teaching styles, the perception of knowledge insecurity to perform some tasks, time dimensions, home-work interface.

**Discussion:** The study found no burnout which differed from previous results. This could be from the diversity of educational climates between two institutions or, perhaps, the social desirability as our study was confidential but not anonymous. Although the quantitative part found no relationship between learning environment and burnout, the interview did.

**Conclusion:** The factors of the educational environment that required improvement to reduce the risk of burnout were identified as the ability of the medical service system to minimize workloads, time schedule arrangements, the clarity of role and work allocation, faculty development programme, the facilities and the infra-structure.

**Take-home Message:** - Work related quality of life has correlation with educational climate

- Residents provided educational environment characteristics that could contribute to burnout in this study, such as the as inappropriate tasks, teachers and teaching styles, the perception of knowledge insecurity to perform some tasks, time dimensions and home-work interface.

#5GG10 (2796)

**Nursing students' satisfaction of the clinical learning environment and its related factors in Japan**

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*Michiko Tanaka*  
*Junji Otaki*

**Background:** Learning environment in clinical practice is an essential component in the nursing education. It is in actual clinical settings including various factors, and little is known what factors relate to students' clinical learning. So we explored the students' satisfaction of the clinical learning environment (CLE) and its related factors.

**Summary of Work:** A multicenter, cross sectional questionnaire survey was conducted in 2015 using the Clinical Learning Environment, Supervision and Nurse Teacher (CLES+T) evaluation scale developed by Saarikoski (2008). Participants were recruited from eight nursing colleges in Japan. Data were analyzed using descriptive analysis, ANOVA and univariate analysis.

**Summary of Results:** 563 students completed the questionnaire and were generally satisfied with their clinical practices. The level of satisfaction was different among student's study year, hospital type, or occurrence of supervision, also showed the positive relation to student's perception of each CLES+T sub-dimension. All result was with a significance level of 5%.

**Discussion:** Our findings suggested the students' perception of CLE containing the pedagogical atmosphere, supervisory relationship and role of the nurse teacher might become the factors of students' satisfaction in the clinical practice. The result also suggested the student's study year and hospital type might affect students' perception on CLE.

**Conclusion:** We investigated the nursing students' satisfaction of the CLE and its related factors in Japan. Multiple factors were extracted related to students' satisfaction in their clinical practice from the light of the learners' viewpoints.

**Take-home Message:** Japanese nursing students' satisfaction in their clinical practice was related to their perceptions on CLE. Focusing on students' perceptions is helpful for nursing educators to improve CLE.

**AMEE**

**2018**

4GG3 (2001)

**Association of Different Medical Student Selections and Mid-term Testing in Year One of Medical School**

**Authors**

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**Presenter:** Anant Khositseth, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

**Background:** Medical student selection is one of the important process in order to achieve the programme learning outcomes.

Conventionally, we select our first-year medical student through the central selection according to the high score in two sets of examination including (a) medical aptitude, ethics, and relevant thinking process (30%) along with (b) testing of basic knowledges. The top-rank score students will be enrolled in our programme. Alternatively new method of selection includes biomedical admission test (BMAT), average grade in high school, English proficiency, and multimini-interviews (MMI) was introduced to our programme.

**Method:** One-hundred and forty-seven first-year medical students (conventional group) were compared with 22 first-year medical students (new process group). The entering examination scores in the conventional group was correlated with the average grade at mid-term examination,  $r = 0.4339$ ,  $p < 0.0001$ . The results of mid-term testing were compared in both groups. All data were shown as median and interquartile (IQR).

**Results:** The average grade in conventional group was not significantly different than in the new process group (3.4 (3.04 – 3.57) vs 3.47 (3.2 – 3.57)). The subjects including Biology, Mathematics, Physics, Chemistry, and English were graded as A (4.0), B+ (3.5), B (3.0), C+ (2.5), C (2.0), D+ (1.5), D (1.0), and F (0). There were no significant differences in Biology [3.0 (2.5 – 3.5) vs 3.0 (2.5 – 3.5)], Mathematics [3.0 (2.5 – 3.5) vs 3 (2.5 – 3.5)], Physics [3.0 (2.5 – 3.5) vs 3.0 (2.0 – 3.5)], and Chemistry [3.5 (3.5 – 4) vs 3.5 (3.5 – 4)]. As expected, the English score was significantly higher in the new process group [3.5 (3.5 – 4.0)] than in the conventional group [4.0 (4.0 – 4.0)]. The development of the new process was intended to select the students' competencies including knowledge, inter- & intrapersonal capabilities, and critical thinking rather than the high score in knowledge. Long-term follow for the ultimate outcomes is exciting. Knowledge testing was comparable in both groups  
**Conclusion:** Medical selection process should not concentrate only on high score examination but other competencies is also important.

4GG4 (892)

**How is first impression related to MMI-results and to OSCE- examinations two years later?**

**Authors**

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**Presenter:** Dietrich Klusmann, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

**Background:** The first impression is a shortcut for figuring out traits like trustworthiness, dominance and competence in others. A host of social psychological studies show that first impressions emerge fast from little information and without introspection. Agreement between judges is substantial, but correlations with actual trait measures are low. In this study the proportion of variance in multiple mini-interview (MMI)-ratings explainable by the first impression of competence is estimated.

**Method/Results:** In an 8-station MMI for medical student selection two judges in each station answered the question "Does this applicant appear to be qualified for studying medicine?" within 30 seconds of the first encounter, subsequently they rated overall performance in the 5-minutes MMI-task. Most interesting are the cross-correlations: first impression of rater 1 with performance rating of rater 2, and vice versa, because these are only influenced by the fact that an impression rating has been made, not by within-rater dependency of the actual rating. Two outcome measures were used: OSCE stations with a psychosocial aspect and supervisor ratings based on a general practice clerkship. First impression ratings formed a scale ( $\alpha = .71$ ), just as mean MMI-performance ratings did ( $\alpha = .69$ ). The correlation between first impression and MMI-performance was  $r = .46$  if both ratings were made by the same rater and  $r = .37$  if made by different raters. The correlations of both measures with two psychosocial OSCEs were about  $r = .20$ . Predictive validity of MMI-performance ratings did not improve significantly when first impression variance was controlled. Results for supervisor ratings were mixed.

**Conclusion:** First impressions about the qualification of applicants partly explain the consistency of the MMI-performance ratings across raters and stations. This is not an artifact of repeated measurement: Even when within-rater dependency is controlled, substantial shared variance remains. First impression information might be used for the improvement of MMI- performance ratings.

**Take-home message:** First impressions about the qualification of applicants are rated consistently across stations and correlate with MMI- performance ratings.



7JJ3 (3000)

**Can Emergency Response Team (ERT) training by paramedic students improve basic life support quality in undergraduate students and university staff in Mahidol university?**

#### Authors

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**Presenter:** Jaruwan Pruktayanunt, Ramathibodi Hospital, Bangkok, Thailand

**Background:** Sudden cardiac arrest is one of the leading causes of death in Thailand. Once cardiac arrest has occurred, early recognition is critical to enable rapid activation of the EMS and prompt initiation of bystander CPR. In Mahidol university, there are no CPR training for undergraduate student and university staff. Emergency Response Team(ERT) training aimed to train undergraduate student and university staff in Mahidol university to know how to do basic life support and used of automatic electrical defibrillator(AED). This study aim to evaluate the effectiveness of Emergency Response Team(ERT) training in undergraduate student and university staff in Mahidol university by paramedic student.

**Method:** We conducted a 1-day ERT training, consist of lectures and workshop. Before and after the course, participants had been tested for BLS knowledge and confident in BLS by using the standard 20 items MCQ exam. Data were analyzed by using the Wilcoxon Sign Ranks Test.

**Results:** There were 1000 participants enroll to Emergency Response Team(ERT) training, male 415(41.5%), mean age were 29.5±15.2 years old. For BLS knowledge, the Pre-course evaluation was 12.3±3.5, and the score of Post-course evaluation was 17.5±2.2 and p-value < 0.05. For BLS confident of chest compression and use of automatic electrical defibrillator (AED), totally 5 points, the Pre-course evaluation was 1.5±0.5, and the score of Post-course evaluation was 4.5±0.4 and p-value < 0.05

**Conclusion:** Emergency Response Team (ERT) training by paramedic student can improve competency of undergraduate student and university staff to BLS performance significantly in both MCQ and confident score. BLS training in undergraduate student can do by paramedic student.

7JJ4 (3527)

**Team Based Practice (TBP) - the new team based learning system of clinical clerkship at the surgical department - suitable for shy Japanese students**

#### Authors

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**Presenter:** Soichi Murakami, Soichi Murakami, Center for Medical Education, Dept. of Gastroenterological surgery, Hokkaido University, Sapporo, Japan

**Background:** It seems to be more difficult for Japanese medical students than the other countries' students to raise their aggressiveness and autonomy during the bedside training. Japanese nature is shy and they don't have sufficient training to obtain autonomy in the primary and secondary education. And they didn't have enough training for getting autonomy even in the early grade of medical university. When they start the clinical clerkship, they get realized the necessity to train by themselves, and bewildered. They can receive the good training if there are good instructors in the ward, however there are very few good instructors in the very busy surgical wards. To solve this problem, we developed the TBP for the students who come to our department for the first time, to make their training meaningful. TBP is a team-based learning system, consists of 4 domains - history taking, anatomical assessment (surgical indication), physiological assessment (tolerability), and operation - which are considered as essential evaluation and planning before surgery, and students can learn and act according to TBP. It is an excellent system to make the surgical clinical clerkship useful, and to foster the students' autonomy and activeness. We herein introduce the TBP and indicate the effectiveness of it.

**Method:** The survey was conducted to 104 students who came to our ward as a trainee of clinical clerkship for the first time, and answers obtained from 101 students who agreed to the survey were used for analysis. The parts of the answer data of the open-ended questions were classified by similarity, and achievements were divided into three categories - cognitive (C), affective (A) and psychomotor (P) domains - following Bloom's taxonomy. Training evaluations are also carried out.

**Results:** Top three Achievements were as follows: knowledge, understanding, and diagnosis of disease: 22 (C), knowledge of assessment of tolerability: 16 (C: 15, A: 1), knowledge and understanding of operation: 16 (C: 15, A: 1). Training evaluations revealed that 67/93 (72%) students considered TBP as a favorable system for surgical clerkship.

**Conclusion:** TBP is a useful system for clinical clerkship in gastroenterological department.

## 9JJ: Posters: Student Stress and Burnout

**Location:** Hall 4.u, CCB  
**Date:** Tuesday 28<sup>th</sup> August  
**Time:** 1600-1730 hrs

9JJ1 (876)

### A Factorial Validation and Psychometric Properties of the Thai Version of the Maslach Burnout Inventory - Student Survey among Thai medical students

#### Authors

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#### Presenter:

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**Background:** Burnout is a psychological condition consisting of high emotional exhaustion, low personal accomplishment and depersonalization. It is prevalent among medical students especially in Western countries. The Maslach Burnout Inventory survey is the gold standard to diagnose but it has never been translated into Thai language nor validated to use in Thai context.

**Method:** The Thai version of the Maslach Burnout Inventory-general survey for student (MBI-SS) was developed to measure burnout among Thai medical students by a two-stage process, namely the translation process and testing the result for factorial validity and psychometric properties. Then interrater reliability (IRR) by means of Kappa's was assessed to identify the degree of agreement in translation process. Data from the questionnaire was tested for internal consistency. A confirmatory factor analysis was carried out using as fit indices of the  $\chi^2$ , df, Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA).

**Results:** 545 medical students participated in the survey (76.1% response rate, female 52.1%). The IRR was acceptable with Kappa of 0.83. The confirmatory factor analysis demonstrated to an adequate fit of  $\chi^2/df=2.619$ , CFI=0.937, TLI=0.944 and RMSEA=0.060, which indicated that the Thai version of the MBI-SS provided reasonable fit to the data among Thai medical students. However, removal of a factorial model with item 13 provided a superior fit with RMSEA 0.055. Internal consistency by Cronbach's  $\alpha$  was acceptable with 0.79.

**Conclusions:** The Thai version of the MBI-SS was shown to have adequate validity and reliability. The final model with

item 13 removal provided superior fit than the original version.

**Take-home message:** The Thai version of the MBI-SS represents a valid and reliable instrument to diagnose burnout among Thai medical students.

9JJ2 (1132)

### The Prevalence and Associated Factors of Burnout in Thai Medical Students

#### Authors

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#### Presenter:

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**Background:** Burnout has been described as a syndrome of emotional exhaustion, relating to students' mental distance from studies and reduced academic efficacy. Many studies show students experience high burnout during medical education. Little is known about the prevalence of burnout, and its associated factors, among Thai medical students.

**Method:** The Maslach Burnout Inventory-Student Survey (MBI-SS) questionnaire was translated to Thai and distributed to 671 second- to sixth-year medical students at Naresuan University. High burnout can be characterized by a score of >14 on exhaustion, >6 on cynicism, and <23 on academic efficacy. The GPA <2.5 (from 4) or the failure to pass the National License tests were used to classify poor academic achievement. Gender, medical school admission scheme, and age were recorded. Results were analyzed using the Chi-square test.

**Results:** A total of 510 medical students (76% response rate) completed the survey. The second-year to sixth-year students demonstrated various high burnout rates (13%, 12%, 22%, 24%, and 35%, respectively;  $p<0.001$ ). The prevalence of high burnout in low-performing students was significantly greater than that in the high achievers (31% and 18%, respectively;  $p=0.024$ ). While the difference in high-level burnout between graduate entry students (mean age 29, 14%) and the undergraduate group (mean age 21, 18%) was not significant ( $p=0.229$ ), a significant difference was found in high emotional exhaustion (42.50% and 61.03%, respectively;  $p=0.001$ ). There was no difference between male (21%) and female (16%),  $p=0.244$ .

**Conclusions:** High burnout progressively develops over the course of medical education, with the highest in the final year; possibly due to increased professional responsibility. The lower degree of emotional exhaustion in graduate entry students could be related to greater motivation, emotional maturity or better coping strategies from previous studies, whereas high burnout found in low-performing students may be caused by academic struggle or low motivation. These factors should be further investigated.

**Take-home message:** The clinical academic year may lead to high burnout in medical students. There should be an appropriate support system/program to assist and/or prevent the increasing rate of burnout.

**AMEE**

**2019**

## #4GG Posters - Mentoring/CPD

### 4GG02 (2502)

**Date of Presentation:** Monday, 26 August 2019

**Time of Session:** 1400-1530

**Location of Presentation:** Hall/Foyer F, Level 0

### Factors affecting medical students burnout and motivation in the new mentoring program

#### AUTHOR(S):

- Thunyaporn Pruangmethangkul, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand (Presenter)
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#### ABSTRACT

**Background:** Because of burnout epidemic among medical students and professionals, attempts to alleviate burnout is intensified. According to the JD-R model, burnout is mainly predicted by high job-demands and lack of job-resources. At Ramathibodi Medical School, a new mentoring program has been launched for second-year students aimed at promoting social support/community, self-development, and a culture of respect and appreciation. This study aims to explore the following question: Which factors of the new mentoring program do medical students perceive as having an impact on their stress/burnout and motivation?

**Summary of Work:** This is the second-phase of an explanatory mixed-methods study. The first-phase was a quantitative study to identify burnout levels using the Maslach Burnout Inventory (MBI). The second-phase involves a qualitative approach. Eighteen participants with highest levels of burnout identified at the first-phase were individually interviewed. Content analysis of the interview transcriptions were independently analyzed by the authors, followed by consensus meetings.

**Summary of Results:** Factors in the mentoring program students perceived as helping to alleviate burnout were: a) fun and relaxing atmosphere of the activities, b) peer/group interaction with shared feeling/experiences and support, c) mentor's advice and support, d) mentor as a role model. Major activities students perceived to improve motivation were: patient/clinical-exposure experiences and mentor's retreat sessions. These activities improve students' motivation by: creating connection from classes to real-life clinical experiences, providing empathetic and dedicated physician/mentor role models, and improving students' self-efficacy. Factors hindering students' motivation were: competing priorities of tasks (e.g. examination), lack of mentor's contact-time and engagement, the gap-generation (made it difficult to build rapport with the students) and failing to create a safe space for group sessions.

**Discussion and Conclusions:** The interventions pointed towards a decrease in burnout and improved motivation, through three main paths: a) increase the value of the learning activities and professional work, b) improve students' self-management (self-efficacy, time-management and emotional regulation), c) improve the sense of community/belongingness.

**Take-home Messages:** Burnout and motivation interventions should be addressed on these two domains: a) improving students' and mentor's engagement, b) creating a safe environment for group interaction.

## #4JJ - Posters - Selection

### 4JJ10 (807)

**Date of Presentation:** Monday, 26 August 2019

**Time of Session:** 1400-1530

**Location of Presentation:** Hall/Foyer F, Level 0

### Multiple Mini-Interviews in Medical Student Selection

#### AUTHOR(S):

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#### ABSTRACT

**Background:** Multiple mini-interviews (MMIs) has been widely used for medical student selection. We generally recruited candidates relied on higher score in examination. Alternatively, another track using portfolio and MMIs was developed. This study was to determine the process of MMIs.

**Summary of Work:** One-hundred students (regular schools) and 53 (international schools) applied the program. Using portfolio (personal statement and past experiences) scoring by 7 independent reviewers. Studying in the international schools was significantly correlated with selection (OR 3.288 [95% CI, 1.643-6.581], p=0.001. Forty-five candidates enrolled in MMIs including psychiatric screening and portfolio verification (no scoring) and 8 stations including station (1) service orientation, (2) social skills, (3) teamwork&leaderships, (4) capacity for improvement, (5) self-awareness, (6) handling stress, (7) ethics, and (8) communication, Each station (8-minute) has two interviewers/observers independently scoring for each candidate (scale A, B, C, D, F).

**Summary of Results:** Kappa analysis (K) demonstrated poor agreement in station (1) to (5) (K -0.01 to K 0.17); fair agreement in station (6) and (7) (K 0.33, K 0.39); and moderate agreement in station (8) (K 0.47). Since the score mark was transformed to continuous variables scaling from 0 to 4, Kendalls coefficient of concordance (W) demonstrated good agreement in station (5), (7), and (8) (W 0.5878, 0.5688, 0.6398); fair agreement in station (4) and (6) (W 0.2964, 0.2789); and poor agreement in station (1) to (3) (W 0.275, 0.2349, 0.025). Twenty-eight candidates selected by MMIs had significantly higher proportion of students studying in the international schools but not related to the higher score from portfolio. The scores from all stations except station (4) and (7) significantly predicted selection by MMIs. Station (5) was the strongest predicting factor for selection by MMIs, followed by station (1), (2), and (3).

**Discussion and Conclusions:** There were variation in scoring between 2 observers. Self-awareness was the strongest predictor for the selection. There was no correlation between portfolio rating and MMIs scoring.

**Take-home Messages:** Two observers in MMIs station tend to be better than single observer. We propose using both portfolio and MMIs in the final process of medical student selection.



## #10EE ePosters - Simulation

### 10EE06 (2791)

**Date of Presentation:** Wednesday, 28 August 2019

**Time of Session:** 0830-1015

**Location of Presentation:** Foyer C, Level 2

### The study of agreement between emergency physician staff and paramedic students to evaluate simulation training

#### AUTHOR(S):

- Chaipayorn Yuksen, Ramathibodi Hospital, Thailand (Presenter)
- Sorawich watcharakitpaisan, Ramathibodi Hospital, Thailand
- Nicha Cha-aim, Ramathibodi Hospital, Thailand

#### ABSTRACT

**Background:** Simulation training has become an important strategy in the field of paramedicine and is universally recognized as a potential alternative to learning through actual encounters. It has consistently been improved into an ideal approach that promotes clinical knowledge and skills of medical procedures, teamwork, developing an effective management strategy, and critical thinking under stressful conditions without putting patients at risk. Simulation training is adapted into the curriculum of Ramathibodi Hospital's Faculty of Medicine, regularly arranged under the supervision of emergency physician staff and assessed with the standardized checklist.

**Summary of Work:** Objective: This study aimed to validate the simulation evaluation of senior paramedic student compare with emergency staff evaluation with the standardized checklist. Methodology : A retrospective analytic cross-sectional study design was conducted to evaluate total of 10 paramedic simulation training scenarios. The Cohen's kappa values and agreement percentages were calculated for the agreement of the emergency staff VS senior paramedic student evaluation. Each scenario was scored according to a standardized checklist for trauma, ACLS, Toxicology and PALS situations by 3 independent raters which includes 2 senior paramedic students and an emergency physician staff.

**Summary of Results:** The Emergency staff evaluation in Trauma and ACLS standardized checklist had substantial agreement with the evaluation of 4th year paramedic student (kappa of 0.760;  $P < 0.001$  and kappa of 0.704;  $P < 0.001$  respectively) and 3rd year paramedic student (kappa of 0.820;  $P < 0.001$  and kappa of 0.882;  $P < 0.001$  respectively). But there are slight agreement in other scenario (PALS, Toxicology).

**Discussion and Conclusions:** The Emergency staff evaluation in Trauma and ACLS standardized checklist had a strong correlation with the senior paramedic student evaluation.

**Take-home Messages:** The used of standardized checklist in Trauma and ACLS scenario for paramedics training can be evaluated by senior paramedic students.

# **AMEE**

# **2022**

## 2H4 (1418)

**Date of presentation:** Monday 29th August

**Time of session:** 08:45 - 09:00

**Location of presentation:** Gratte Ciel 3

### **An evaluation of six aspects of well-being in medical students from a middle-income country: A preliminary study**

Karen M Tam<sup>1</sup>, Tantawan Awirujworakul<sup>1</sup>

<sup>1</sup> *Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

#### **Background**

Although studies have shown higher prevalence of mental health issues among medical students, research on other aspects of student's well-being is not fully explored. This study aims to evaluate six aspects of student well-being at Faculty of Medicine Ramathibodi Hospital, Thailand to identify areas of concern, and suggest possible interventions that not only treat those with existing illness, but alleviate quality of life for all students.

#### **Summary Of Work**

This mixed-method study distributed six health questionnaires measuring depression, anxiety, quality of life, insomnia, burnout and grit among Ramathibodi medical students (n= 701, 69.3%) on a voluntary basis in May 2021. Additionally, thematic analysis of factors contributing to stress and well-being were done on qualitative feedback from the online survey.

#### **Summary Of Results**

Results from the questionnaire indicated prevalence in depression (8%), anxiety (8%), poor quality of life (1%), insomnia (5%), burnout (21%), and grit (3.2; 0-5). However, WHO Quality of Life index indicates moderate to poor quality of life in other aspects, namely in physical (39%), social (44%), and environmental (47%) health. Factors contributing to unhealthy well-being include academic pressure, time management, study environment during COVID-19, and studying intensity. Although our Well-being Centre supports students with mental health issues, we have not focused on the majority of students with moderate well-being or may be at risk. Mapping of feedback indicates relationships between academic, social, and mental health, suggesting improvement in one area can influence others.

#### **Discussion And Conclusion**

A majority of students still reside in the moderate level of quality of life or are mildly depressed, anxious or burnt out, leaving a gap to achieve better well-being. To address this on a population-level, systematised interventions should focus on well-being on three levels: individual, student representatives and faculty. An integrative response is proposed to cover different aspects and prevent students who are at risk becoming unwell, while simultaneously treating those with mental





**2K08** (1844)**Date of presentation:** Monday 29th August**Time of session:** 08:35 - 08:40**Location of presentation:** Tete d'Or 2

## **Mind Map: A Technique for Colorful Expression of Medical Student's Academic Knowledge?**

Vich Thampanya<sup>1</sup>, Kannikar Saisawat<sup>1</sup>, Patchara Ruengwongroj<sup>1</sup>, Thanida Vitayavisavasakul<sup>2</sup>,  
Dumkerng Raiwa<sup>3</sup>

<sup>1</sup> MECCR, Chiang Rai, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine  
Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand <sup>3</sup> MD master training, Bangkok,  
Thailand

### **Background**

Mind Maps are visual summaries of ideas that are connected to the main, minor, and interrelated sub-issues. They help to see the big picture of the relationship of the various stories involved in the issue. It can develop a better systematic thinking process and can be used for educational purposes.

### **Summary Of Work**

This study examined a Mind Map activity organized for fourth-year medical students by inviting two highly qualified speakers. The medical students were divided into five groups. Each group wrote a Mind Map of their chosen academic content and sent a representative to present it to their peers. After their peers finished listening, the presenter themselves assessed the understanding of the academic content presented, including its use. Fellow listeners rated the speaker on how well the speakers were able to provide understanding with the Mind Map method. At the end of the activity, they assessed the overall picture of the activity and whether it could convey knowledge and understanding of its use and should be held in the next year or not.

### **Summary Of Results**

29 Medical students participated in this 3-hour activity, 62% of whom were male, average age 21.86+/-0.80. A full score of 5 given by listeners to the 5 Mind Map presenters received an average score of 4.30 +/- 0.23. The presenters assessed themselves by presenting them in the form of Mind Map, reaching an average score of 4.35 +/- 0.39. All medical students assessed the overall presentation of the Mind Map activity with an average score of 4.43+/-0.31.

### **Discussion And Conclusion**

The overall assessment of this activity was considered an appropriate activity, with over 85% of medical students considering it to be held the following year. This activity also practiced



**2L05** (3627)

**Date of presentation:** Monday 29th August

**Time of session:** 08:20 - 08:25

**Location of presentation:** Salon Tete d'Or

## **Community-based course enhances habits of systems thinker in pre-clinical year medical students.**

Krittin Venunan<sup>1</sup>, Phanuwich Kaewkamjonchai<sup>2</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

### **Background**

Systems thinking is the critical component in health systems science framework. Since the systems thinking largely contributes to effectiveness of working within health systems, enhancing students' habits of systems thinking might be impactful. However, some literature argued the challenges in building of systems thinking habits and skills. Faculty of Medicine Ramathibodi Hospital provided 5-weeks compulsory Community Medicine course for 3<sup>rd</sup> year medical students. During the course, the students learned about health, determinants of health, health service systems, epidemiology, and systems thinking concept and tools. Then, the students were divided into groups of 23-24 to perform the community survey and qualitative data gathering to explore about health-related issues and synthesis the contextualized recommendations for the local health services. This study aimed to assess effects of the course on systems thinking habits in students.

### **Summary Of Work**

We deployed 14 items self-assessment questionnaire on systems thinking habits, based on Waters' Center for Systems Thinking's habits of systems thinker. The self-assessment was done by the 3<sup>rd</sup>-year medical students before and after attending the course on voluntary basis. One-way paired t-test was applied to demonstrate the difference between the score.

### **Summary Of Results**

One-hundred and ten students who participated in both before- and after- self-assessment were included for the analysis. The result shows the significantly improved of total score ( $P < 0.001$ ). The analysis of the improvement in each 14 habits also demonstrates the significant improve in all habits ( $P < 0.05$ ).



## 3H2 (2650)

**Date of presentation:** Monday 29th August

**Time of session:** 10:15 - 10:30

**Location of presentation:** Gratte Ciel 3

### **The Development of Incoming Medical Students' Leadership Skills Through Pre-Medical School Projects: A Case Study**

Supicha Hanputpakdikul<sup>1</sup>, Karnthida Jan-Anurak<sup>1</sup>, Salisa Apiwatgaroon<sup>1</sup>, Punyisa Lekha<sup>1</sup>, Chonmapun Chamachot<sup>1</sup>

<sup>1</sup> *Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

#### **Background**

Leadership is essential for medical students since doctors are required to lead a team of professional healthcare workers. Previous studies have shown that extracurricular activities play a role in the development of leadership during medical school. In addition, medical schools are starting to incorporate leadership courses into their curricula. This study focuses on the development of leadership characteristics on incoming medical students who initiated a student-led pre-medical school project (RAdiator) before the start of their journey in medical school, rather than during medical school.

#### **Summary Of Work**

A mixed-method design was applied. Twenty-four participants who initiated and participated in RAdiator were given questionnaires based on the NHS Leadership Framework Self-Assessment Tool 2012 which investigates the seven core leadership domains, asking participants to rate themselves on different aspects of their leadership skills before and after participating in the project. The percentage change in leadership skills was calculated. A structured interview was conducted with the top 20% of participants with the highest percentage changes, to further explore the reasons behind the increase in leadership skills.

#### **Summary Of Results**

The mean percentage increase in leadership skills was  $39.0 \pm 25.5\%$ . The domain with the highest average percentage increase of 43.2% is 'Setting Direction'. When asked about the reason behind the development in leadership skills, participants suggested that they are more willing to dedicate time and energy, when given the opportunity to lead a project in which they are passionate about. Barriers limiting them from excelling in their leadership skills include unfamiliarity with new colleagues and a lack of experience in systematic working.



**3K04** (0187)

**Date of presentation:** Monday 29th August

**Time of session:** 10:15 - 10:20

**Location of presentation:** Tete d'Or 2

## **Why fulfilling the mandatory rural services is still interesting for new-generation medical students?: A qualitative study at Ramathibodi Hospital Medical School, Thailand.**

Ornanong Chanajarunwit<sup>1</sup>, Kanokporn Sukhato<sup>1</sup>, Saipin Hathirat<sup>1</sup>

<sup>1</sup> *Faculty of Medicine Ramathibodi Hospital, Mahidol Univesity, Bangkok, Thailand*

### **Background**

Thailand has experienced a long-term shortage of rural doctors. As a result, three-year mandatory rural services following graduation had been introduced by the government to help solve the problem. Despite the recent changes allowing newly graduated medical students to have more choices following graduation, many still choose to fulfill the mandatory rural services, which may lead to uncertainty for both workplace and future career paths. This study aims to understand ideas, perspectives, and factors affecting the decision-making process to choose mandatory rural services among final-year medical students at Ramathibodi Hospital, Mahidol University.

### **Summary Of Work**

In-depth interviews with 14 final-year medical students of Ramathibodi Hospital Medical School, Mahidol University were carried out from June 2020 to January 2021. Purposeful sampling and Snowball techniques were used to collect the data until the data was saturated. Verbatim transcription and content analysis were performed by researchers independently. Investigator triangulation was conducted to achieve result consensus.

### **Summary Of Results**

Fourteen medical students, 11 females and three males, median age 23 years, were participated in this study. The main perspectives that led medical students to do the mandatory rural services were its challenges to prove their competencies, comfort, security in welfare and income, and their social accountability to work for underprivileged people. An important factor affecting their decisions might be their personalities, including resilience, autonomy, multi-potentiality, and adaptation. Other factors include coming from an open-minded family, having good role models, hierarchy in medical curriculum, relaxing and independent rural lifestyle, and good experiences for future residency training.



**6F2** (3468)

**Date of presentation:** Monday 29th August

**Time of session:** 16:45 - 17:00

**Location of presentation:** Gratte Ciel 1

## **Against the bureaucracy barrier: An attempt to reform the way medical student organization work**

Sarute Chawwavanich<sup>1</sup>, Kiratikon Chalermkiartsakul<sup>1</sup>, Manisara Jirapornsuwan<sup>1</sup>, Phanuwich Kaewkamjonchai<sup>2</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

### **Background**

Student organization plays an important role in medical school by representing students' voice and facilitating student-led activities. However, in Thai context, working in one has been associated with working with bureaucracy. This leads to low retention rate and high burnouts for participating students. Thus, we aim to explore and implement the Evolutionary Organization concept as suggested by a management scholar to reform the organization.

### **Summary Of Work**

Two-day Operating System Workshop, based on the Evolutionary Organization concept by Aaron Dignan, was conducted online. It was aimed to build capacity and motivate the members to create continuous participatory change. Quantitative and qualitative evaluation forms were distributed after each session and at one month post-workshop.

### **Summary Of Results**

Twenty-three and thirty-six responses were recorded for each session. The participants found they have learned the current problems and approaches to successful organization, complexity of a problem and the purpose of creating a purpose. They also found creating OKRs and aligning team's purpose to be applicable for the future. However, some participants found the workshop impractical and hoped for more concrete examples. Quantitatively, the participants found the session to be useful, interesting, and were generally satisfied. Majority of the participants wanted to continue with the next sessions and would recommend the workshop to their colleagues.

Thirty-one responses were recorded for the follow-up evaluation. They found 'alignment of vision', 'united purpose', and 'people positivity and complexity consciousness' to be beneficial. Quantitatively, they found the workshop to be somewhat useful and potentially more useful in the future. They also



**10L07** (2033)

**Date of presentation:** Tuesday 30th August

**Time of session:** 15:00 - 15:05

**Location of presentation:** Salon Tete d'Or

## **Defining The Future of Medical School: Process of Vision and Strategies Establishment from Multi-stakeholders' Perspectives**

Peerasit Sitthirat<sup>1</sup>, Setthanan Jarukasemkit<sup>1</sup>, Phanuwich Kaewkamjonchai<sup>2</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

### **Background**

In the 21st century, health systems have faced challenges due to shifting paradigm from acute care to chronic care or disruption by the pandemic. It is undeniable that medical education also plays a role parallel with the health system as a supply unit that generates health personnel to respond to any health needs. To create a future education system, perspectives about changes in medical school should be explored and develop a comprehensive concept for further development in medical school.

### **Summary Of Work**

We applied a qualitative method by arranging a one-day workshop consisting of 3 key group activities including a knowledge sharing session, brainstorming for common vision establishment, and visualization of each theme. Sixty-seven participants were included in this workshop from various groups of stakeholders: medical students (n=19), residents/fellows (n=13), medical educators (n=15), and school executives (n=19). Lastly, qualitative data analysis was performed by three investigators.

### **Summary Of Results**

During the session, the vision for the next 10 years medical school was synthesized and stated that we want "A medical school that co-designs and delivers high-value personalized education with transdisciplinary research and innovation" with another four majors strategies of medical school: (1) Medical School as Safe Space, (2) Value-based Education, (3) Personalized Education and Multidisciplinary, (4) System-based practice. In the reflection session, participants stated that this workshop well engaged all stakeholders. The participants got the opportunity to share their opinion and co-create common goals. Moreover, this workshop inspired participants to initiate their own educational scholars.



**12L10** (3523)

**Date of presentation:** Wednesday 31st August

**Time of session:** 08:45 - 08:50

**Location of presentation:** Salon Tete d'Or

## **Barriers of Medical and Dental Admission Involving Biomedical Admissions Test (Bmat) In Thailand**

Sunita Susamakulwong<sup>1</sup>, Sira Pornsiriprasert<sup>1</sup>, Pitchayapa Vichitvigrom<sup>1</sup>, Panattaporn Tangguay<sup>1</sup>

<sup>1</sup> Medical Student, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

### **Background**

BioMedical Admissions Test (BMAT), a standardized test with content specification under the UK National Curriculum, has been a part of medical school applications worldwide. Although the study by Cambridge Assessment verified the fairness of the test in the UK, none has investigated whether that applies to middle-income countries such as Thailand. This study aims to explore the underlying barriers in BMAT preparation of Thai students for university application as a study case for other countries. The term “fairness” in this study means an equitable opportunity for all to attend such schools.

### **Summary Of Work**

A cross-sectional quantitative survey had the respondents voluntarily submit the BMAT scores of 2021 and a self-assessment of information, geographical, financial, language barriers, and time constraints.

### **Summary Of Results**

Responses from 90 Thai high school student samples from 30 provinces who use BMAT scores for admission are reported. Eighty-seven of the respondents (97%) experienced at least one type of barriers, where 74 (82%) experienced time constraints, 73 (81%) experienced information barriers, 64 (71%) experienced language barriers, 62 (69%) experienced financial barriers to accessing resources, and 48 (53%) experienced geographical barriers.

The prevalence of language and geographical barriers are statistically different in the Bangkok Metropolitan Region and other provinces. [OR=4.47] (P<0.01), [OR=2.42] (P<0.05) respectively.

The prevalence of language barrier correlates with lower scores in Part 1 (P<0.01) and numerical score of Part 3 (P<0.05). Similarly, the prevalence of geographic barriers correlates with lower scores in Part 1 (P<0.05) and Part 3 (P<0.05).





**13K09** (1665)**Date of presentation:** Wednesday 31st August**Time of session:** 10:40 - 10:45**Location of presentation:** Tete d'Or 2

## **Factors increasing pre-clinical medical students' engagement to synchronous online learning in Thailand**

Nartthawat Rangsiprakarn<sup>1</sup>, Chatsiri Kulramart<sup>1</sup>, Surapong Lertthammakiat<sup>1</sup>, Pongtong Puranitee<sup>1</sup>

<sup>1</sup> *Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

### **Background**

Synchronous online learning (SOL) in the medical curriculum is increasing during COVID-19 pandemics. Engagement of students in SOL results in positive learning outcomes. This study aimed to identify the factors leading to high cognitive engagement (ICAP model) of pre-clinical medical students toward SOL according to the theory of planned behavior framework.

### **Summary Of Work**

This study is a qualitative study using a grounded theory method. The pre-clinical medical students were chosen by purposive sampling and in-depth interviewed individually. The semi-structured interview guide was developed following the theory of planned behavior. The data was collected and analyzed until the saturation was met. The analysis was performed in line with the six steps process of thematic analysis.

### **Summary Of Results**

Fifteen pre-clinical medical students were interviewed. Four themes leading to high engagement in SOL were 1. students' metacognition: understanding their own learning process and preference 2. self-preparedness in both content and equipment before class: increasing students' readiness for SOL and self-confidence to participate more in class 3. positive learning environment: student-teacher and student-peer relatedness initiate engagement and foster social connection in SOL. 4. structure of SOL activities: small group discussion, adequate time-space for preparation before the group activity, organizing the difficulty level of the content appropriate to the learners' prior knowledge and time schedule relevant to students could enhance students' engagement.

### **Discussion And Conclusion**

Components needed in a SOL were not different from those in an onsite interactive session. However, the arrangement of a highly engaged SOL required the cooperation among students and teachers. Students took more responsibility to make them ready for SOL compared to onsite class.





**14K07** (3960)**Date of presentation:** Wednesday 31st August**Time of session:** 13:00 - 13:05**Location of presentation:** Tete d'Or 2

## **Exploring Mistreatment in Medical School: How mistreated students feel, the consequences, and the solution**

Innara Srisatidnarakul<sup>1</sup>, Peerasit Sitthirat<sup>1</sup>, Phanuwich Kaewkamjonchai<sup>2</sup>, Pawit Kanchanatawan<sup>1</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

### **Background**

Mistreatment in medical schools has been documented for many years despite the demonstration of its negative consequences. In 2021, students from the Faculty of Medicine of Ramathibodi Hospital conducted a study on the prevalence and factors related to mistreatment perception among Ramathibodi medical students, and the results revealed that the majority have experienced mistreatment. We aim to determine the types, sources, consequences of mistreatment in medical students. The solutions are synthesized based on participants' perspectives.

### **Summary Of Work**

We applied a qualitative study by performing an in-depth interview with the mistreated clinical-year students. Voluntarily, the participants were included by a snowball technique until data saturation (n=44). The scenario, feeling from the situation, causes and consequences of mistreatments, as well as the viewpoint regarding the solution, are among the interview questions.

### **Summary Of Results**

Verbal abuse, public humiliation, being graded unjustly, being ignored, being banned, sexual harassment are common types of mistreatment in the institution. The feeling of shock, fear, uncertainty, embarrassment, anger are some of the most typical reactions to mistreatment. Major reasons for mistreatment are lack of effective communication, the irritable mood of personnel, and students' unpreparedness before attending the class. The effects manifest themselves in a variety of ways, including a depressed mood, a negative attitude toward the department, and a desire to avoid being in that situation in the future. Many students stated that the faculty seems unconcerned about the situation because it has been going on for years. Also, mistreatments are frequently caused by the same abusers, indicating that mistreatment is mostly related to the abuser, miscommunication and the establishment of specific rules for certain personnel are the reasons for many mistreatments, and students do not complain because of the repercussions.



**14K08** (0328)**Date of presentation:** Wednesday 31st August**Time of session:** 13:05 - 13:10**Location of presentation:** Tete d'Or 2

## **Mistreatment Report, Consequences and Related Factors Among Thai Medical Students in the Faculty of Medicine Ramathibodi Hospital, Mahidol University**

Waravudh Naothavorn<sup>1</sup>, Pongtong Puranitee<sup>2</sup>, Winitra Kaewpila<sup>1</sup>, Sutida Sumrithe<sup>1</sup>

<sup>1</sup> *Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand* <sup>2</sup> *Department of Pediatrics, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

### **Background**

Medical students' mistreatment has devastating consequences including burnout, depression, and unprofessionalism behaviors. However, mistreatment is not effectively reported in Thailand. This study aimed to explore the prevalence and characteristics of mistreatment, reporting channels, related factors, and consequences among Thai medical students in the Faculty of Medicine Ramathibodi Hospital, Mahidol University.

### **Summary Of Work**

A cross-sectional survey with a correlational study was accomplished. Thai version of the Clinical Workplace Learning Negative Acts Questionnaire-Revised (NAQ-R) Scale was translated using the forward-backward process with interrater agreement analysis. The survey consisted of the Thai Clinical Workplace Learning NAQ-R scale, Thai Maslach burnout inventory-Student Survey (MBI-SS), Thai Patient Health Questionnaire (PHQ-9 for depression risk), demographic information, mistreatment characteristics, reporting channels, related factors, and consequences. Descriptive and correlation statistical analysis using multivariate analysis of variance (MANOVA) was applied.

### **Summary Of Results**

681 medical students (52.4% female, 54.6% the clinical year) responded to the survey (56.1% response rate). The reliability of the Thai Clinical Workplace Learning NAQ-R Scale was high (Cronbach's alpha = 0.922), with a degree of agreement of 83.87%. 74.45% of medical students were being mistreated. The most common type of mistreatment was workplace learning-related bullying (67.7%). Attending staff was reported the most common source of mistreatment (31.6%). Burnout affected 34.65%, while 7.05% had a high depression risk. The academic year was the most significant factor associated with medical students' mistreatment especially in workplace learning-related bullying ( $r = 0.261$ ,  $p < 0.001$ ). Depression and burnout had significant relationship with mistreatment in person-related bullying (depression:  $r = 0.199$ ,  $p < 0.001$ , burnout:  $r = 0.204$ ,  $p = 0.012$ ). Some



## Workshop 14O (2032)

**Date of presentation:** Wednesday 31st August

**Time of session:** 12:30 - 14:00

**Location of presentation:** Rhone 4

### Introduction to OKRs for managing student organization effectively

Peerasit Sitthirat<sup>1</sup>, Phanuwich Kaewkamjonchai<sup>2</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

#### Background

Student organizations have many roles as student representatives and activity initiatives. From the concept of student engagement in medical school, student organizations must be the main body of the system that provide space for students to engage with school operations in various areas. So, plenty of work is delivered annually from the student section including extracurricular activities, academic supports, and wellbeing improvement. To set the common goal and evaluate how successful each project is, selection for tools is challenging. In the business sector, Objectives and Key Results, as known as OKRs introduced by Intel, are widely adopted. In the Faculty of Medicine Ramathibodi Hospital, the student organization named Ramathibodi Medical Student Council (RAMSC) has used OKRs as a tool for goal setting for 2 years. This workshop, therefore, aims to introduce OKRs to medical students and simulate how they are formulated and applied.

#### Who Should Participate

Students who have participated in student organization from broad levels: school level to international level, particularly who are interested in concepts of student engagement and organization development.

#### Structure Of Workshop

(1) Introduction (15 min)

(2) Sharing sessions – using the structure of Knowledge café and break out into small groups. (15 min)

The focussed topic for discussion includes:

- How did you evaluate the outcomes of student organizations?
- What is the barrier of those tools ?

(3) Brief summary of OKRs (15 min)



# **AMEE**

# **2023**

## A23SCODITL03 – Interprofessional and Team Learning (2159)

### SOFT SKILLS ENHANCEMENT OF PRECLINICAL YEAR MEDICAL STUDENT VIA EXTRACURRICULAR ACTIVITY: A CASE STUDY

Pat Ngamdachakijl, Jedsarit Chanprapaipatl, Jittapat Sungworawongpana<sup>1</sup>, Monsiri Chomphunuchl, Natnicha Pleansril, Thanyathorn Thaninjeerawat<sup>1</sup>, Phanuwich Kaewkamjornchai<sup>2</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand;

<sup>2</sup>ExChange Lab, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

**Background:** Effective and collaborative work across disciplines and institutional frameworks is critical for future healthcare providers to cope better with the twenty-first-century challenges. Researchers have found an association between extra-curricular activities and the acquisition of teamwork and leadership skills. Encouragement of such participation from the university further fosters students' development of essential soft skills. This study focuses on enhancing soft skills: teamwork, leadership, systems thinking, creativeness, and prosocial behavior characteristics of the third-year preclinical medical students who conducted a musical stage play (Rama D'RAMA), a charity work performed by medical students at every step.

**Summary of Work:** We applied the sequential mixed-method design to assess the effects of conducting Rama D'RAMA. For the quantitative part, we deployed a self-assessment survey developed based on the NHS framework of healthcare leadership skills and the teamwork skills assessment tool from the study by Thomson et al. (2009). Fifty-seven participants holding various roles, such as director committee, showman, writers, and composers, have responded to the survey voluntarily. The skills which have significantly changed in each domain were identified. The mechanisms that describe the change in skills were synthesized using qualitative data by conducting in-depth interviews with nineteen randomized responders.

**Summary of Results:** The percent of students reported significant increases in leadership skills was 70.25%. For the leadership domain, 'Working with Others' had the biggest change of 77.19%. There is a 70.86% increment for teamwork skills. Moreover, among the skills set, 'Creativeness' had the most significant change. The mechanisms that led to change in skills were said to be the unfamiliarity of roles and responsibilities tasked for each person and the involvement with third parties, where communication and active participation must be ensured. Time constraints have been suggested to be a double-edged sword, an aid and a hindrance to improving soft skills.



## A23SCODITL06 – Interprofessional and Team Learning (3303)

### OKRs: A Tool to Unite Student Organizations and Break Silos

Pasit Komonsuwan<sup>1</sup>, Seksan Yoadsanit<sup>1</sup>, Phanuwich Kaewkamjornchail, Peerasit Sitthirat<sup>1</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

**Background:** Student organizations are established to represent students and engage with faculties. To achieve specialization and ensure clear responsibility, organizations often implement departmental structures. Ramathibodi Medical Student Council (RAMSC) is also structured into 12 departments. However, departmentalization has created silos where stakeholders lack a shared vision and mission. In the business sector, Objective and Key Results (OKRs) are widely adopted as an effective-collaborative goal-setting method. Thus, we aimed to implement OKRs to increase alignment and promote unity within student organizations, with RAMSC as a case study.

**Summary of Work:** OKRs execution consisted of 3 phases: framing, alignment, and revision. Firstly, executive board members collectively drafted organizational OKRs. Then each department would develop departmental OKRs accordingly. Regarding OKRs alignment, each stakeholder from 12 departments had one-on-one sessions with every colleague seeking collaboration opportunities. Finally, to serve the key results, the key action plans were executed. For the revision, workshops for each department were managed to evaluate key results and rearrange OKRs at discretion. To assess OKRs implementation, a quantitative survey was distributed, and qualitative in-depth interviews were held with all stakeholders.

**Summary of Results:** Using OKRs in 2022, qualitatively, all members have shared a common perspective that OKRs is an effective tool for goal setting and action planning, including evaluating the goals. OKRs allowed everyone to establish mutual understanding regarding the organization's missions and current progress. Moreover, the use of OKRs led to more collaboration between departments. Unanimously, they encouraged the next executive board to continue using OKRs. Quantitatively, 54 projects were initiated, with a quarter of those being collaborations between departments. The data supports that using OKRs leads to more innovative and collaborative projects.

**Discussion and Conclusion:** OKRs is a promising goal setting and evaluation tool. This can lead to a collaborative environment, student engagement, and organizational agility. However, cooperation from all departments is required for maximum effectiveness. Additionally, OKRs is more suitable for innovative work than routine tasks. In 2022, OKRs was adopted at organizational and departmental levels. To promote collaboration,



**215** (5085)

**Date of Presentation:** Monday 28th August

**Time of presentation:** 1000 – 1015

**Location:** Castle III, Crowne Plaza

## **Research Skills, Perception, and Motivation in the Undergraduate Medical Students**

Jiravadee Tangjariyatam<sup>1</sup>, Kittipong Panpanawan<sup>1</sup>, Pornthep Tanpowpong<sup>2</sup>, Pongtong Puranitee<sup>2</sup>, Samart Pakakasama<sup>2</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital Mahidol University, Bangkok, Thailand;

<sup>2</sup>Department of Pediatrics, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand

### **Background**

Faculty of Medicine Ramathibodi hospital has encouraged medical students to conduct their own research, beginning with an extracurricular program, and recently incorporating a 6-year longitudinal research courses. We aimed to survey all medical students on research-specific and transferable skills (such as teamwork, communication skills), perceptions of barriers, and students' motivations.

### **Summary of Work**

This is a cross-sectional descriptive study using a validated self-report 5-point Likert scale survey on the aforementioned aspects. The survey questions have been formally translated, evaluated on agreement, reliability, and validity. Multivariable logistic regression was performed to define associations between research skills and factors of interest.

### **Summary of Results**

We received 538 responses (a response rate of 44% with 66.5% of medical students in the pre-clinical years, and 50% females), while 43% had been involved in the processes of conducting research (e.g., writing a proposal, data collection, publishing a manuscript). The overall mean scores for research-specific skills, transferable skills, barriers, and motivation were 2.9, 3.5, 3.0, and 3.3, respectively. Students perceived that they were most





**2P9** (3305)

**Date of Presentation:** Monday 28th August

**Time of presentation:** 0948 - 0954

**Location:** Carron 2, Loch Suite, SEC

## **Researchers Never Walk Alone: a Social Network Analysis of an Undergraduate Medical Research Community**

Seksan Yoadsanit<sup>1</sup>, Chawisa Teansue<sup>1</sup>, Peerapass Sukkrasantil, Phanuwich Kaewkamjonchai<sup>2</sup>, Borwornsom Leerapan<sup>3</sup>, Setthanan Jarukasemkit<sup>1</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand;

<sup>2</sup>ExChange Lab, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand; <sup>3</sup>Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakarn, Thailand

### **Background**

Collaboration is one success factor in any community as it promotes the flow of knowledge and increases productivity. However, measuring collaboration as social capital is underexplored in undergraduate medical research communities. Social network analysis (SNA), a sociology methodology, is widely used to investigate and map relationships in communities. With SNA, social capital can be quantified and categorized into pre-defined network topologies leading to suitable interventions and monitoring tools. Hence, this study aimed to define and compare the social network structure that leads the research community at the Faculty of Medicine Ramathibodi Hospital, Thailand, to success.

### **Summary of Work**

A cross-sectional quantitative survey was distributed to students who qualified for research scholarships in 2021 and 2022 to determine the advice-seeking frequency among related individuals. The results were compared between years to identify community transformation. SNA was used to analyze and visualize data into sociograms to explain three key features: clustering, global separation, and centrality (number of interactions/person). These parameters were computed into a small-world coefficient that reflects how close the network's properties are to a small-world, a pre-defined





**715** (3611)

**Date of Presentation:** Tuesday 29th August

**Time of presentation:** 1200 – 1215

**Location:** Castle III, Crowne Plaza

## **Comparative Study of Palliative Care Education and Service Performance among SEA Countries**

Piwat Suppawittayal, Nantadet Bunyavejchevin<sup>1</sup>, Phanuwich Kaewkamjornchail

*<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

### **Background**

As Thailand has one of the fastest-aging populations in the world, medical attention should be focused on maximizing elderly patients' quality of life. Although Thailand's palliative care (PC) is categorized in level 3a, it is reported that medical workers still lack knowledge and awareness, leading to a lack of confidence to perform PC.

### **Summary of Work**

A narrative review was performed from 2022 to early 2023, adopting an investigation tool investigator in Medline, Embase, and Google scholar to prove our hypothesis that different palliative care education for health professions led to different palliative care performances. 65 pieces of literature were identified that cover the development and comparison between PC medical education and service of countries in the South-East Asia (SEA) region.

### **Summary of Results**

Despite similarities in society and culture among SEA countries, there are differences in PC systems' performance. Countries with high-quality PC systems including Singapore and Malaysia (categorized in 4a) also demonstrated a high level of palliative care education. In these two countries, rigorous efforts in integrating PC into mainstream medicine and medical curricula can be seen. Palliative medicine is regarded as a subspecialty. Specific hands-on training and workshops in addition to lectures to both medical professionals and volunteers, expand their knowledge, skills, experience, and confidence in treating patients. Written and oral examinations were required in addition to clinical training. PC is



**8F5** (3958)

**Date of Presentation:** Tuesday 29th August

**Time of presentation:** 1500 – 1515

**Location:** Argyll III, Crowne Plaza

## **Impact of quality improvement research (QIR) project on systems thinking habits – A pilot study in Thai medical students**

Peerapass Sukkrasanti<sup>1</sup>, Setthanan Jarukasemkit<sup>1</sup>, Phanuwich Kaewkamjornchai<sup>2</sup>

*<sup>1</sup>Faculty of Medicine Ramathibodi Hospital Mahidol University, Bangkok, Thailand; <sup>2</sup>Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Samut Prakarn, Thailand*

### **Background**

Health System Science (HSS) has been introduced to be the third pillar of medical education since 2017. Faculty of Medicine Ramathibodi Hospital implemented four-year HSS courses to the current curriculum. In the final year, medical students are required to conduct a quality improvement research (QIR) in community hospitals as a part of learning about health systems in Thailand. Although the standard to evaluate HSS competency has yet to be well defined, systems thinking, a key linking domain in the HSS framework, is critical to be assessed among students. Therefore, we aim to evaluate the impact of conducting QIR on systems thinking competency.

### **Summary of Work**

This pilot cohort study was done among Ramathibodi final-year undergraduates (n=16) who performed QIR projects in different community hospitals. To assess systems thinking competency, we applied 'The habits of a system thinker' by Waters Center. The questionnaire comprises 14 items rated on 4-Likert scales representing behavior frequency. The students responded to the questionnaire before and after finishing the course as a pretest-posttest design on a voluntary basis. The data were analyzed by paired one-tailed t-tests and subgroup analysis was defined as three groups based on three different learning contexts which meant three community hospitals.



**9J5** (3908)

**Date of Presentation:** Tuesday 29th August

**Time of presentation:** 1700 – 1715

**Location:** Alsh 1, Loch Suite, SEC

## **Exploring Medical Schools' Admission and Support Policies for People with Disabilities in Various Nations**

Mathanee Yongsaroj<sup>1</sup>, Nitchanun Kuptanon<sup>1</sup>, Panrak Thongnuesuk<sup>1</sup>, Winitra Kaewpila<sup>2</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand; <sup>2</sup>Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakarn, Thailand

### **Background**

To reflect the diversity of the medical communities, achieving the inclusion of individuals with disabilities in the profession is a top priority. This helps reduce stigma and stereotypes, lessen healthcare disparity, and create better health outcomes. The policies regarding admission and disability support might play a crucial role in the under-representation of medical students with disabilities. This study aims to explore and compare medical schools' different admission and supporting policies for people with disabilities in various countries.

### **Summary of Work**

The admission and supporting policies regarding people with disabilities from the official medical board exam websites, medical schools' official websites and accreditation bodies' websites of sixteen countries from various regions and income distribution were selected for documentary analysis. Data unavailable in English were excluded. Four critical questions from the "Self-Assessment of Technical Standards" were used to determine the characteristics and the level of inclusivity.

### **Summary of Results**

Three domains were analyzed; 1) accessibility of data, 2) inclusivity of selection, and 3) offering and types of disability support. The majority (n=10) of admission policies were classified as inclusive, eight of which are partly inclusive and two fully inclusive. Of the five



## Session 10A

### 10A (0770)

**Date of presentation:** Wednesday 30th August

**Time of session:** 09:00 – 10:30

**Location of presentation:** Hall 2

### **East Meets West: Experiences of Two AMEE ASPIRE Awardees for Excellence in Student Engagement.**

Céline Marmion<sup>1</sup>, Muirne Spooner<sup>1</sup>, Sarah Ghobrial<sup>1</sup>, Anant Khonsitseth<sup>2</sup>, Pongtong Puranitee<sup>3</sup>, Chawisa Teansue<sup>3</sup>

<sup>1</sup> Royal College of Surgeons University of Medicine and Health Sciences, Dublin, Ireland <sup>2</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>3</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

#### **Background**

Student engagement broadly refers to the time and energy invested by students to collaborate with its institution for mutual benefits by participating in academic and non-academic activities including learning, teaching, research, governance, and community-based initiatives.

The School of Medicine, RCSI University of Medicine and Health Sciences, Ireland and the Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand are the 2022 ASPIRE-To-Excellence Awardees for Student Engagement. The ASPIRE programme transcends traditional accreditation processes, serving to 'identify, recognise and reward world-class excellence in education'.

- RCSI is a transnational university with undergraduates from 95 countries, ranked **top 50 for International Outlook and top 250 universities worldwide (2023 Times Higher Education World University Rankings)**.
- Mahidol University is a single-site university, ranked in the top 3 in life sciences and medicine in ASEAN and top 14 in ASIA (the QS World University Rankings by Subject 2022).



## 10L4 (3355)

**Date of Presentation:** Wednesday 30th August

**Time of presentation:** 0945 - 1000

**Location:** Boisdale 1, Loch Suite, SEC

### **The benefits of mental health workshop on medical students**

Winrada Khomate<sup>1</sup>

<sup>1</sup>*Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

#### **Background**

Burnout is a state of physical and mental exhaustion related to work and is especially prevalent among medical students, making it a potential area worth addressing. According to a needs assessment conducted on Ramathibodi medical students, 87 (95%) reported that they have experienced burnout at least once a year; 57 (63%) would like support through the provision of workshops. Although most students believe that this form of assistance would be beneficial, it remains unexplored what students gain from attending. This study aims to see what participants learned and whether they feel their knowledge of the topic and coping skills have improved after the session.

#### **Summary of Work**

A burnout workshop, which involved active and passive activities, was hosted. In the session, attendees participated in a test of knowledge on burnout myths, an informative session by the guest speaker and a discussion panel. For the discussion, attendees were introduced to a case study, elaborated on the signs of burnout together and shared personal techniques to combat the condition. We then conducted a descriptive cross-sectional study to see what participants picked up from the session and how their comprehension and management of burnout changed. A thematic content analysis later followed.

#### **Summary of Results**

The main benefits of attending the session were that the attendees grasped a deeper understanding of burnout, learned the causes of burnout, can self-reflect and realised that adjusting their mindset could help. From the discussion, attendees learned new ways to handle burnout and recognised that other people are dealing with similar conditions.



## **SCO40.3** (6745)

**Date of presentation:** Wednesday 30th August

**Time of session:** 06:30 – 06:45

### **Designing the Non-Technical Skills (NTS) for Medical Degree & Masters in Management (MDMM) Co-curricular Activities**

Alisa Limsuwan<sup>1</sup>, Trin Thananusak<sup>2</sup>, Prattana Punnakittikashem<sup>2</sup>, Surawej Numhom<sup>3</sup>, Panupol Thepyasuwan<sup>4</sup>, Hataipat Kamalaporn<sup>5</sup>, Titiwat Sungkaworn<sup>4</sup>, Sinnop Theprugs<sup>6</sup>, Monchai Rojratanachai<sup>6</sup>

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#### **Background**

Non-technical skills (NTS) are the social, cognitive, and personal management skills necessary for improving human performance in complex systems. These skills are deemed to be 'non-technical', in that they have traditionally resided outside most formal technical education curricula. The importance of human factors in the performance of technical tasks has been appreciated by healthcare professionals, particularly in patients' safety. Therefore, NTS trainings become increasingly incorporated within "clinical" clerkship. There were limited data regarding NTS training for pre-clinical medical students, particularly in a dual degree of Medical Doctor and Master in Management (MDMM).

#### **Summary Of Work**

We explored the potential benefit of introducing the NTS as a co-curricular activity for pre-clinical MDMM students. These skills are beyond, but complement, both regular medical and management curricula and form part of a coordinated approach to an all-round education. We designed the NTS workshop using small group activities and real case scenarios experienced in the medicine, management, and some aviation contexts. The



## **EPODA24** (4383)

### **"Change Agents" from school to health systems: assessing post-medical school graduates via Alumni Visiting Program**

Pharanyoo Osoththanakorn<sup>1</sup>, Sirichai Hongsanguansri<sup>2</sup>

*<sup>1</sup> Department of Community Medicine, Faculty of Medicine at Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>2</sup> Department of Psychiatry, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

#### **Background**

The Faculty of Medicine Ramathibodi Hospital, Mahidol University has set a moonshot goal of being an "Incubator of Change Agents" and has implemented seven program learning outcomes, including traditional medical school outcomes and two additional outcomes related to teamwork and leadership and research competencies.

According to Frenk and Chen (2010), education and health systems have complex interactions, and competency evaluation is crucial for medical graduates to be effective healthcare professionals. The traditional post-medical school evaluation in Thailand includes a one-year internship program provided by the Medical Council of Thailand. However, gaps still exist in individualizing the post-medical school evaluation program based on the university's identity and in evaluating graduates as "Change Agents."

The Alumni Visiting Program, since 1972, provides an opportunity to gather feedback from graduates about their competencies and problems in the healthcare system. This program could help fill the gaps in post-medical school leadership and "Change Agent" evaluation.

#### **Summary Of Work**

A review of secondary data was performed. The reports of the Alumni Visiting Programme from 2007–2022 were thematically analysed to find the core theme of the program and the result of the evaluation.





## **Summary Of Results**

Analysis of 12 annual reports from 85 hospitals in 47 Thai provinces, with some years of missing data due to COVID-19 and file damage, showed that Ramathibodi graduates have strong knowledge and are willing to speak up, leading to workplace changes. However, they lack hand-skills, self-management, interprofessional collaboration, and context-based clinical work. Community hospitals recommended that medical students should be equipped with health system management knowledge and skills, including leading the Hospital Accreditation (HA) process.

## **Discussion And Conclusion**

The health system provided feedback on a leadership framework and considered graduates as potential "Change Agents". Alumni highlighted the need for health system science knowledge and skills, including health system management. However, a more strategic and quantitative approach is required for proper post-medical school evaluation.

## **Take Home Messages**

- Not only "Incubating Change Agent" in health systems is a challenging goal, but also, it's measurement. As once said "we cannot improve what we cannot measure," a comprehensive, community-based measurement process must be developed and implemented in the complex adaptive system of health systems and health education.





## **EPODDPL18** (4370)

### **Identify Geriatric Primary Care Competencies in Thailand: Multi-perspectives (A Qualitative Study)**

Pariyakorn Chuensuwonkul<sup>1</sup>, Nippitch Pratoom<sup>1</sup>, Jidapa Wattanasiri<sup>1</sup>, Phanuwich Kaewkamjornchai<sup>2</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand <sup>2</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, Bangkok, Thailand

#### **Background**

As Thailand's population ages, the need for high-quality healthcare services for the elderly has become a public health priority and primary care plays a critical role in meeting the needs. However, the competencies and skill set of GPs in primary care settings in SEAR middle-income countries, including Thailand, have not been adequately addressed in the context of an aging society. Thus, there is a pressing need to develop a competency-driven curriculum to prepare GPs to meet the demands of this future medical trend. By leveraging the perspectives of multi-stakeholders, the study aims to develop a comprehensive list of competencies that could aid the development of an inclusive medical curriculum to enhance primary healthcare services.

#### **Summary Of Work**

We applied a qualitative approach to synthesis the essential competencies list by performing semi-structured in-depth interview with various stakeholders including internal medicine doctor (n = 1), geriatric doctor (Family Medicine) (n = 1), community medicine doctor (n = 2), GPs working in primary care (more than 1 year of experience) (n = 2) and health system specialist (n = 2). Interview sessions were thematically analysed to synthesize a list of essential competencies.

#### **Summary Of Results**

The study synthesized a list of 149 essential competencies, categorized into five domains and 51 sub-themes: Attitudes, Values, and Awareness (12 competencies, 6 sub-themes); Interpersonal Skills (45 competencies, 14 sub-themes); Personal Skills (17 competencies, 6



sub-themes); Clinical (39 competencies, 14 sub-themes); and Healthcare System (37 competencies, 12 sub-themes).



## **EPODEM14** (3024)

### **Exploring structures and mental models underpinning the current assessment and grading system**

Vetinee Suebnukarn<sup>1</sup>, Winitra Kaewpila<sup>2</sup>, Ploy Pornpaisanvijit<sup>1</sup>, Suthan Srisangkaew<sup>2</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital Mahidol University, Bangkok, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samutprakan, Thailand

#### **Background**

One main cause of medical students' burnout comes from their academic achievement. Assessment and evaluation systems can cause various unintended consequences. Grading policies can influence the learning environment, affecting student's motivation, stress and well-being. Despite the evidence of benefits in changing grading policies, for some medical schools, change is hard and can always bring resistance at many levels. To effectively implement and manage change, this study aims to understand how current assessment systems and policies were maintained, by exploring system elements and their underlying assumptions and mental models.

#### **Summary Of Work**

Five focus group interviews with medical students and faculty staff were conducted at The Faculty of Medicine Ramathibodi hospital, Thailand. Sixteen participants were asked to share and discuss their experiences with our assessment system, underlying policies and intended/unintended outcomes. Four layers of the iceberg model; events, patterns, structures and mental models, were used as a framework to portray underlying mental models that influence our current practice in the assessment system.

#### **Summary Of Results**

In layers of events and patterns, frequent high-stake exams and letter grading promotes extrinsic motivation, yet increases stress, diminishes student well-being and causes unintended outcomes such as students' mental health problems. Pass/fail grading improves student well-being, however at the expense of student motivation, causing



unintended outcomes such as superficial learning behaviour which decrease student's competencies. Structures that maintain the current system are mainly the curriculum which is primarily content- and schedule/service-based, the residency selection process, and the quality assurance process. The mental model underpinning these structures includes 1) gaming the system 2) a teacher-centred assessment system, and 3) overvaluing summative and standardized measurement.

### **Discussion And Conclusion**

In designing assessment and evaluation systems, the focus should be on the two most important factors, student's learning and student's well-being. To create an assessment system that promotes students' active learning and well-being, stakeholders should explore complex interrelated systems and address underpinning structures and mental models in order to successfully implement change.

### **Take Home Messages**

- Policymakers and other stakeholders should develop interventions that address underpinning structures and mental models in order to successfully implement change.



## **EPODFD5** (3267)

### **Factors affecting residents' internal motivation, grit and well-being**

Pimwipa Chuented<sup>1</sup>, Pongtong Puranitee<sup>1</sup>, Samart Pakakasama<sup>1</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital Mahidol University, Bangkok, Thailand

#### **Background**

In competency-based medical education for postgraduate training, residents face many challenging situations, which some might compromise their well-being or lead them to exhaustion or burnout. Factors in self-determination theory and grit are important part for residents pursue to learning outcome achievement and good well-being. This study aimed to explore a relationship between internal motivation, grit, well-being, and other factors related to internal motivation, grit, well-being among non-western Asian residents.

#### **Summary Of Work**

An explanatory sequential mixed-methods study using a survey to explore correlations between satisfaction with psychological needs, grit, and WHO well-being from September to November 2021, among residents in Ramathibodi Hospital, Mahidol University. The students who scored the highest and lowest on each part were purposively invited to participate to the second phase. In Phase 2, a semi-structure interviews were applied. A thematic analysis was used by two researchers and the data was collected until saturation point was met.

#### **Summary Of Results**

A total of 245 residents (51% major ward, 65% female) participated in the first phase. There was a strong association between internal motivation, grit, and well-being ( $r = 0.46 - 0.90$ ). In comparison, female residents score higher on autonomy and relatedness ( $p = 0.04, 0.01$ ), while residents with less family responsibility score higher on relatedness than other residents ( $p = 0.01$ ). Residents who get more sleep also score higher on autonomy, relatedness, and well-being ( $p < 0.05$ ). Residents who exercise more than five times per week have higher scores for well-being ( $p < 0.01$ ). In phase II, 30 residents participating thematic analysis revealed that residents' internal motivation, grit, and well-being were promoted by



a supportive learning environment, a well-designed curriculum, the actions and personalities of faculty members, and good personal factors.



## **Discussion And Conclusion**

Internal motivations were significantly correlated with grit, well-being, gender, family burdens, exercise, and sleep hours. Priority should be given on how to promote internal motivation, grit and well-being by enhancing a positive learning environment, creating a well-designed curriculum, fostering good characteristics and actions of faculty members, and supporting residents' personal lives.

## **Take Home Messages**

- Faculty developmental programs should concern about individual's, external and internal factors to promote resident well-being.





## **EPODFD6** (4329)

### **Breaking Down Organizational Silos with a Liberating Structure: “What I Need From You” (WINFY)**

Supicha Hanputpakdikul<sup>1</sup>, Chawisa Teansue<sup>1</sup>, Phanuwich Kaewkamjornchai<sup>2</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital Mahidol University, Bangkok, Thailand <sup>2</sup> Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

#### **Background**

Conducting effective agenda-setting to meet the demands of different functioning people is often challenging, especially in a large-scale organisation such as a medical school. Being aware of this, we introduced an interactive discussion session called ‘What I Need From You’ (WINFY) in the Ramathibodi Faculty-Student Seminar to promote inclusion and connectivity among various stakeholders. The purpose of the activity was to resolve issues brought about by organisational silos, allowing medical education stakeholders to articulate their core needs and respond to each other’s requests.

#### **Summary Of Work**

41 stakeholders were grouped into six clusters according to their affiliations, which included faculty executives from different campuses, professors and student representatives from both pre-clinical and clinical years. Each cluster is expected to present its needs and respond to requests with a ‘Yes’, ‘No’ or ‘To be Discussed’. The discussion was carried out in front of 52 spectators. Cluster spokespersons were then allowed to elaborate on their answers within a time limit. Moreover, post-activity observation and interviews were conducted three months later to track the implementations.

#### **Summary Of Results**

WINFY served as our first-ever platform for executives and students to communicate and give feedback on each other’s needs. There were twelve requests in total, each making a meaningful impact on the student learning experience, staff well-being and campus life.



Examples include increasing accessibility to learning resources, redefining educators' job scope on different campuses, and calling for the creation of a capacity-building system for educators.

### **Discussion And Conclusion**

We have found WINFY to be a promising tool for uncovering hidden operational inefficiencies and boosting clarity in the agenda-setting process. Furthermore, it creates a sense of accountability by capitalising on public commitment, which motivates stakeholders to respond to requests more actively. WINFY can potentially be used as a platform to resolve long-standing prejudices and mend misunderstandings. All in all, it is a multi-functional tool to promote value-creating collaboration by breaking down departmental silos.

### **Take Home Messages**

- A setting which places importance on clarity and inclusion is imperative to break down organisational silos, contributing to a more effective agenda-setting process.



## **EPODSL30** (4204)

### **Research Initiation in Medical Student, a Case Study from 3rd year medical student from Thailand (2023 Cohort)**

Settanan Plangsiri<sup>1</sup>, Manisara Jirapornsuwan<sup>1</sup>

<sup>1</sup> Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

#### **Background**

Research plays an important role in helping students develop critical thinking skills which plays a big role in their future careers. However, many still struggle with finding the ideas and topics they are truly interested in as well as the right professor to work with.

#### **Summary Of Work**

The quantitative method used in this research was done through surveying the 2023 third year Ramathibodhi medical student cohort in the context that everyone is under a research curriculum and must complete research proposal requirements before graduation. T-test and Chi-square are used in analysing the association of the data.

#### **Summary Of Results**

The most important factor that students reported as helping them initiate the idea for their research most is discussion with faculty staff who specialize in the area of interest, followed by self-literature reviewing and finally, attending research-seminars (rank as most important/moderately important – 91.5%, 53.2%, 46.8% respectively). These same trends continue for the student's successive research projects (second, third, fourth, fifth) except for 'attending research-seminars', which contrastingly become the factor students find as much less important dropping down to just 21.9% in most/moderately important and shooting up to 34.4% in least/mildly important.

Research advisors are mostly found from attending research-seminars (38.1%) and from directly asking class lecturer to become their research advisor (20.3%), whether it is their first research project or not. But the difference is the first research advisors are also mostly from



being class professors (23.4%), while the successive research (second, third, fourth and fifth) are from other professors' recommendations (28.1%).

### **Discussion And Conclusion**

The result shows that discussion with staffs, personal literature review and research-seminars are the most important events that help student sparked their ideas. However, after their first research is done, they are less likely to find ideas from research-seminars.

Research seminar also help most students find their advisors. If medical school wants to promote research in their student population, then supporting these activities would be very helpful.

### **Take Home Messages**

- We hope that this study will be a helpful guide for research-interested individuals by helping to point out where to find ideas and advisors in order to start a successful research project.



## **EPODTEL5** (0972)

### **The development of PharMatch, an e-card game, to promote the learning of autonomic nervous system pharmacology**

Pornpun Vivithanaporn<sup>1</sup>, Pawita Temsang<sup>2</sup>, Donttarat Jutamaneeroj<sup>2</sup>, Jitpisuth Tantasiri<sup>1</sup>, Yaowalak Paichamnann<sup>1</sup>

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#### **Background**

Pharmacology is perceived as one of the most terrifying topics in preclinical sciences. Autonomic nervous system (ANS) pharmacology is usually planned as the first topic. This topic is complicated since it contains many unfamiliar terminologies. In a block system, medical students learn this topic in one- or two-weeks' time; thus, information overload is a common problem. This creates a need to create a fun and effective learning strategy to help students memorize ANS drugs.

#### **Summary Of Work**

PharMatch contains 4 types of cards: drug name, mechanism of action, indication, and side effect. The aim of this game is to match each drug name (18 cholinergic and 28 adrenergic drugs) with other properties. Some drug names link to more than one indication or side effect. Self-drawn cartoon figures are used to illustrate indications and side effects. Card layout is similar to a solitaire game. The time will stop when players collect a full stack of five drugs. Players could review the collected drug cards and their information in the game library. PharMatch was launched as an alternative online supporting tool during the class of ANS pharmacology for 204 medical students in September 2022. Self-rating score and comments were collected after the examination.

#### **Summary Of Results**

132 students logged in to explore the game and 113 students finished the game at least one time. 68 students played more than 20 times. 33 students used less than one minute to clear



the game. 64 students collected all the drug name cards. The rating score of drug name memorization was 4.29/5. A sub-analysis of students playing more than 20 times showed the rating score of 4.67/5. The major reason for students not playing the game was the lack of time.

### **Discussion And Conclusion**

Students thought PharMatch was useful and fun. They also liked the challenge that one drug was paired with several side effects and learned this through a game. Therefore, PharMatch is an effective learning tool to promote the learning of drug name, mechanism of action, indication and side effect.

### **Take Home Messages**

- Game-based learning can be a solution for difficult-to-teach subjects. It increases the engagement and the learning enthusiasm of students.



## **EPODTFL3** (0110)

### **The Effect of Online Video-assisted Teaching Program on Medical Students Learning Procedure of Fractional Curettage**

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<sup>1</sup> Reproductive Endocrinology and Infertility Unit, Department of Obstetrics and Gynaecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand, Bangkok, Thailand <sup>2</sup> Department of Obstetrics and Gynaecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand. , Bangkok, Thailand <sup>3</sup> Department of Pediatrics, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand, Bangkok, Thailand <sup>4</sup> Gynaecologic Oncology Unit, Department of Obstetrics and Gynaecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand. , Bangkok, Thailand <sup>5</sup> Female Pelvic Medicine and Reconstructive Surgery Unit, Department of Obstetrics & Gynaecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand., Bangkok, Thailand <sup>6</sup> Faculty of Medicine, Bangkok Thonburi University, Bangkok 10170, Thailand, Bangkok, Thailand

#### **Background**

Since 2020, with the entire world in crisis over the coronavirus pandemic (COVID-19), medical students have adapted to hybrid and distance learning. This study aims to compare the learning outcomes of students learning the procedure of fractional curettage in an online video-assisted teaching program to those of students learning the procedure in a traditional class.

#### **Summary Of Work**

A quasi-experimental study was conducted among fourth-year medical students who rotated to Obstetrics and Gynaecology courses between April 2021 and October 2021. Participants in the first two rotations were enrolled in traditional classes, and the online video-assisted teaching program was introduced in the subsequent two rotations. Both study groups took OSCEs (objective structured clinical examinations), a pre-test and post-





test with MCQs (multiple choice questions), and a confidence and satisfaction level questionnaire.



## Summary Of Results

A total of 106 fourth-year medical students, 54 in the traditional group and 52 in the online video-assisted teaching program, were recruited. The online video-assisted group showed a statistically better mean OSCE score ( $85.67 \pm 11.29$  vs.  $73.87 \pm 13.01$ ,  $p < 0.001$ ) and mean post-test MCQ score than the traditional group ( $4.21 \pm 0.87$  vs.  $3.80 \pm 0.98$ ,  $p = 0.0232$ ). Moreover, the mean difference between the two groups' pre and post-test MCQ scores was significantly different ( $0.96 \pm 1.37$  vs.  $1.79 \pm 1.50$  in traditional and online video-assisted teaching program groups, respectively,  $P = 0.0038$ ). The participants in the experimental group reported significantly greater confidence ( $P < 0.001$ ) in performing the fractional curettage procedure. However, the mean satisfaction score was significantly higher in the control group ( $p = 0.0053$ ).

## Discussion And Conclusion

The online video-assisted teaching program on the fractional curettage procedure, a necessary and skill-demanding procedure, is an effective and advantageous education tool that improves skills, knowledge, and confidence in fourth-year medical students. We recommend that the video-assisted teaching program is another effectively procedural teaching method for medical students.

## Take Home Messages

- The online video-assisted teaching program on the fractional curettage procedure is an effective and advantageous education tool that improves skills, knowledge, and confidence in fourth-year medical students comparing to traditional class.



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**4M05** (3937)

## **Mapping the Journey: A Study of Constructive Alignment for Assessment Strategies in Pre-Clinical Medical Education**

Tadtada Tanchaisawat, Airada Sakulsantiporn, Winitra Kaewpila, Nutthapoom Pathomthongtaweetchai

Chakri Naruebodindhra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

### **Background**

To develop competent future physicians, a well-constructed medical school curriculum is crucial. The decision-making process in curriculum design requires a systematic 'constructive alignment' approach, synchronizing learning outcomes, activities, and assessments. Curriculum mapping is a pivotal tool, providing a visual and analytical representation to identify gaps and misalignments. This study aims to evaluate the pre-clinical curriculum, exploring the implementation of constructive alignment and pinpointing opportunities for targeted reform.

### **Summary of Work**

A curriculum mapping approach employed the interplay between assessment methods and program learning outcomes (PLOs) in a medical school's pre-clinical curriculum. Using Microsoft Excel and RawGraphs for analysis and visualization, 35 courses were reviewed, emphasizing seven PLOs: 'Medical Sciences', 'Patient Care', 'Health Systems Sciences', 'Professionalism', 'Communication Skills', 'Research Skills', and 'Self-development, Teamwork, and Leadership'. The resulting curriculum map were both diagnostic and visual aid, exposing gaps and insufficient assessments, revealing discrepancies between intended outcomes and assessments.

## Summary of Results

Curriculum mapping highlighted 'Medical Sciences' as the most heavily weighted PLO, while 'Health Systems Sciences', 'Professionalism', and 'Self-development, Teamwork, and Leadership' were underrepresented in the grading system. Assessments predominantly aligned with the types of outcomes, with 'Professionalism Appraisal' and 'Formative Assessments' contributing zero to grading, relying on class participation and assignment completion for evaluation. Multiple-choice tests dominated assessment methods, comprising 61.50% of the total, followed by individual assignments and quizzes at 12.98 and 12.16%, respectively. Soft skills assessments accounted for 30% of evaluations, underlining their importance in the curriculum, though quantification of these skills remained a challenge. Additional methods like direct observation and peer evaluation were considered, indicating a need for more comprehensive assessment approaches.

## Discussion and Conclusions

Our study underscores the need for a strategic rebalancing of assessment distribution. While 'Medical Sciences' currently receive a substantial focus, there is a distinct need to give more attention to 'Health Systems', 'Professionalism', and 'Self-development, Teamwork, and Leadership' outcomes. Insights from evaluating alignment and discrepancies guide targeted curriculum improvements. However, a limitation is the exclusion of clinical years, critical for a holistic curriculum view.

## Take Home Messages

Curriculum mapping is essential for aligning educational objectives with assessment strategies, ensuring accurate representation of students' full medical journey and effective preparation for their future healthcare roles.

## 4T: Conference Workshop – Unlocking Student Engagement: ASPIRE Award Insight and Strategies <sup>(4170)</sup>

**Date:** Monday 26th August 2024

**Session Time:** 14:00–15:30

**Location:** Samarkand, 3rd Floor, Congress Centre

Pasit Komonsuwan, Seksan Yoadsanit, Chawisa Teansue, Maylin Wongjarupan, Natchaporn Namsirikul, Peerasi Sitthirat  
Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

### Background

Student Engagement plays a vital role in medical education. It is essential to maximize learning experience, nurture student well-being, and shape curriculum with vital learner voices. Besides, it is pivotal for continuous faculty development. For a school to be awarded in “student engagement” ASPIRE award, four spheres of student engagement must be achieved: school management, education program, academic community, and local community. These criteria provide a comprehensive framework approaching student engagement. Nevertheless, when it comes to student engagement tools, a one-size-fits-all approach is ineffective. What works for one may not fit another seamlessly. Thus, this workshop aims to share the break-down steps to achieve student engagement in our medical school success journey. The effective strategies that have worked for us and have earned us the ASPIRE award, will be provided. Moreover, we offer the guideline template to let participants reflect and evaluate the current stages of student engagement in their specific context. With our guidance, the participants will develop tailored milestones to achieve student engagement within their unique environment and organizational culture.

### Who should participate

This workshop is designed for educators, curriculum designers, and students who are



eager to learn about student engagement, want to assess their current stage of student engagement and uncover strategies for further development.

### **Structure of Workshop**

· Check-in (5 min) · Defining Student Engagement (10 min) Introducing the concept and importance of student engagement and ASPIRE awards. · Workshop (60 min) The participants rotate through 4 stations (15 minutes each) covering student engagement in school management, education programs, the academic community, and the local community. They will explore Ramathibodi Medical School's student engagement system as a case scenario: learn a toolbox of strategies, techniques, and approaches to enhance student engagement. With a reflection template and guidance, they will have the opportunity to assess the current student engagement stage and craft personalized approaches to student engagement. · Mini-Lecture: Effective student engagement tools implementation (10 min) · Check-out (5 min)

### **Intended Outcomes**

Participants comprehend student engagement and ASPIRE framework. They acquire insights into successful engagement strategies, assess their institutional student engagement status, and develop systems to advance student engagement in their context.

**7J04** (2423)

## **Empowering Healthcare Evolution by Medical Students: Insights from Ramathibodi Medical Students' Quality Improvement Projects in Nakhon Ratchasima's Community Hospitals**

Chatchai Imarom

Faculty of Medicine Ramathibodi Hospital, Bangkok, Thailand

### **Background**

Sixth-year medical students in the Faculty of Medicine Ramathibodi Hospital participate in the "Family Medicine and Community Medicine (RACM 615)" course, emphasising using clinical and research skills to address community hospital challenges. Quality improvement projects are integral to "system-based practice" and health systems science competency. The abstract aims to review trends observed in projects implemented in 2023 and share insights within the academic medicine community.

### **Summary of Work**

A comprehensive review covered 36 quality improvement projects conducted in the academic year 2023 across 12 community hospitals in Nakhon Ratchasima province, Thailand. These projects addressed various healthcare aspects, including cardiovascular diseases, rational drug usage, patient safety, healthcare workforce, governance, and leadership.

### **Summary of Results**

Seven studies from five hospitals focused on cardiovascular diseases, particularly acute myocardial infarction and stroke. Challenges, such as delays in diagnosis and treatment and concerns about referral quality, were observed. Mental health projects and suicide prevention, in particular, were notable. Burnout among medical workers, physical activity, Lean organisation, and organisational learning in governance and leadership were investigated in two separate projects.

## Discussion and Conclusions

Real-world exposure led medical students to recognise the complexities of health systems, revealing that clinical competencies alone may not suffice at the system level. The importance of adopting a systems thinking approach and utilising research tools as the core of system-based practice was emphasised. Diverse projects allowed students to understand different strategies for addressing common problems across varied settings, emphasising the role of context in interventions. Furthermore, the projects themselves reflected what the hospitals were focusing on. The projects also provided insight into hospitals' concerns, notably emphasising cardiovascular diseases like acute myocardial infarction and stroke. Challenges, such as delays in diagnosis and treatment, highlighted pressing issues, indicating the hospitals' commitment to addressing timely and effective care. The QIR lens illuminated critical aspects of healthcare delivery.

## Take Home Messages

The real-world exposure is crucial for enhancing system-based practice in undergraduate medical students. While clinical competencies are fundamental, a deeper understanding of system dynamics and proficiency in research tools enrich the students' problem-solving capabilities. The importance of context in interventions becomes evident through diverse project experiences, emphasising the holistic approach required for effective healthcare evolution.

## 10R: Conference Workshop – Transforming Medical Education Through Change Management: From Vision to Impact <sup>(4829)</sup>

**Date:** Wednesday 28th August 2024

**Session Time:** 09:00–10:30

**Location:** Studio 7, Marriott Hotel

Chawisa Teansue, Seksan Yoadsanit, Pasit Komonsuwan, Maylin Wongjarupun  
Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

### Background

Change management is a pivotal yet often overlooked element in the success of any transformation. While extensively discussed in business contexts, it remains relatively underexplored in healthcare and medical education, despite its relevance. The dynamic nature of the healthcare landscape necessitates a continuous cycle of curricular revisions, the adoption of novel assessment concepts, and the embrace of technology within medical schools – each representing a vital facet of 'change.' However, executing these changes on a broad scale can be a daunting task, often hindered by delays and inefficiencies attributed to resistance to change, insufficient support from higher-ups, and divergent stakeholder engagement. These challenges primarily stem from the absence of strategic change management. It is important to recognise that a successful plan extends beyond generating creative solutions; addressing changes involving people with different priorities is equally essential. To tackle these challenges, this workshop introduces the fundamental principles of change management. Participants will not only gain a deep understanding of the theoretical foundations but also acquire practical skills to engage stakeholders, communicate change, lead group decision-making discussions, and build team alignment in medical education settings. The workshop covers concepts such as Lewin's Change Management Model, the innovative integration of design and systems thinking, stakeholder analysis, Objectives & Key Results, and the strategic

use of facilitation techniques.

### **Who should participate**

This workshop is tailored for educators, administrators, or students seeking innovative tools to drive sustainable change in a multi-stakeholder setting. It is also open to anyone interested in the field of change management and those aspiring to become proficient facilitators.

### **Structure of Workshop**

A series of mini-lectures followed by interactive workshops. [1] Check-In: Sharing Expectations of the Workshop [2.1] Mini Lecture: Introduction to Change Management [2.2] Workshop: Identifying Challenges in Driving Change [3.1] Mini Lecture: Facilitating Multi-Stakeholder Discussions: Integration of Design Thinking and Systems Thinking [3.2] Workshop: Utilising Facilitation Tools to Define Problems [4] Mini Lecture: Managing The Transition Through Objectives and Key Results (OKRs) [5] Reflection & Feedback

### **Intended Outcomes**

Participants will gain a deep understanding of change management principles and acquire a practical toolkit to drive sustainable change in medical education. They will also become more proficient in conducting multi-stakeholder discussions.



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**A24SCODASLSL04** (2695)**Towards Personalized Mental Health Interventions: a Network Analysis of Three Mental Disorders in a Thai Medical School**

Maylin Wongjarupun<sup>1</sup>, Seksan Yoadsanit<sup>1</sup>, Karen M Tam<sup>1</sup>, Winitra Kaewpila<sup>2</sup>, Phanuwich Kaewkamjonchai<sup>2</sup>, Setthanan Jarukasemkit<sup>1</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

<sup>2</sup>Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakarn, Thailand

**Background**

Mental distress is highly prevalent among medical students, associating with reduced academic performance, professional development, and quality of life. Given the unique context of each medical school, a crucial gap remains in how medical schools tailor interventions to tackle student well-being effectively. In a novel psychological approach, network analysis conceptualizes mental disorders as a network of interconnected symptoms, revealing insights into the key symptoms driving mental disorders within that population. We aim to enhance understanding of symptomatic relationships between depression, anxiety, and burnout disorders in Ramathibodi Medical School to identify potential leverage points in designing more effective and personalized interventions.

**Summary of Work**

This cross-sectional study utilizes collected secondary data from Ramathibodi Medical School through an online survey involving 701 medical students. Survey items included the PHQ-9, GAD-7, and MBI to assess symptoms of depression, generalized anxiety disorder, and burnout, respectively. Network analysis was applied to analyze and visualize symptomatic correlations, with nodes in the network



representing symptoms and the edges between them representing their correlations. The most critical nodes were identified with expected influence, representing symptoms that are most likely to create a more significant impact on others. The bootstrapping permutation test was performed to validate our results.

### **Summary of Results**

Our network analysis reveals exhaustion had the highest expected influence (1.26,  $p < 0.01$ ).

### **Discussion and Conclusions**

According to our findings, interventions to tackle mental distress in our medical school should focus on mediating exhaustion, such as through promoting coping strategies to strengthen student resilience or building supportive learning environments. Also, influencing feelings of failure may aid in reducing the risk of suicidal ideation through interventions such as promoting a growth mindset and reforming current assessment methods. Subsequent qualitative studies are recommended to further explore the root causes of these mediating symptoms.

### **Take Home Messages**

Utilizing network analysis to identify pivotal symptoms guides us in designing data-driven policies and the most impactful interventions to support well-being in medical school, from individual to institutional level.

**A24SCODASLSL19** (3184)**Universal Barriers in Medical Education: A Narrative Review of Reporting Mistreatments in Global Perspective**

Natchaporn Namsirikul, Pasit Komonsuwan, Peerasit Sitthirat, Winitra Kaewpila  
Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

**Background**

Through the years, majority research regarding mistreatment in medical schools have successfully concluded high global prevalence, along with yielding information like types, sources, characteristics and consequences. However, in recent years, statistics still suggest high prevalence with only a small amount reported, despite an extensive establishment of reporting systems. Given the context of diverse global cultures and values, understanding the barriers against reporting might be the key to an effective reporting system.

**Summary of Work**

We utilized the narrative review methodology to compare and contrast factors disrupting the mistreatment reporting systems. Various databases, including PubMed and ASME, were searched using key search terms: “medical student”, “mistreatment”, “reporting system”, “barriers”, etc. There were 40 articles that met the review criteria and were processed using thematic analysis.

**Summary of Results**

Despite being conducted in four different countries around the world, the studies show similar difficulties with different rankings among papers. These results can be categorized into three main groups. The first one being the fear of reprisal e.g. poor evaluation, damaged relationship with teachers, hindered career progression and

being labeled a troublemaker. The second one is mistrust in the reporting system. This looks like students don't believe in confidentiality, fairness and effectiveness of the reporting systems. The last one being misunderstandings and lack of knowledge among students. This is when the students think of mistreatment as an inherent part of medical culture or when they fail to recognize subtler mistreatment forms.

### **Discussion and Conclusions**

The consistent findings across studies from the USA, New Zealand, Iran and Canada propose that these barriers arise from universal characteristics of the medical school and existing reporting system, rather than particular regional backgrounds. Key factors influencing these barriers include: (1) the immense power of staff and hierarchical culture driving fear of reprisal, (2) management of reporting systems by individuals holding similar positions to the abusers, (3) the “no pain, no gain” mindset normalizing mistreatment. Despite well-recognition of mistreatment issues in medical education, challenges of reporting systems and further intervention still persist.

### **Take Home Messages**

To effectively deal with the mistreatment in medical education, the focus must shift towards refining reporting systems, investigating stakeholders, identifying barriers, and developing targeted solutions.

**A24SCODEDI04** (1379)**Revelation of Global Disparities in Medical Schools: A Meta-Analysis of LGBTQ+ Healthcare Education in Western versus Eastern**

Phuphinyo Limchantra<sup>1</sup>, Kodchakorn Klongklaw<sup>1</sup>, Sira Korpaisarn<sup>1</sup>, Nutthapoom Pathomthongtaweetchai<sup>2</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

<sup>2</sup>Ramathibodi Medical School, Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakan, Thailand

**Background**

The LGBTQ+ community faces stigmatization and barriers to medical treatment, leading to healthcare disparities and negative health outcomes. Previous studies indicated a lack of training in medical schools, exacerbated by heteronormative societal norms. This meta-analysis reveals a comprehensive evaluation of LGBTQ+ healthcare education on a global scale.

**Summary of Work**

The meta-analysis involved searching three databases: Google Scholar, Scopus, and PubMed. Five studies were selected from seven countries to study LGBTQ+ content inclusion in undergraduate education. With the same dataset, other examined factors were content coverage, assessment inclusion, and clinical training. Students' perceptions regarding content inclusion were also extracted from eight studies, considering the latest publication date. Subgroup analysis was used to emphasize the influence of different normative endemics.

## Summary of Results

Western countries showed a homogeneous representation of 96% inclusion, whereas Eastern countries exhibited only 67%. The main factor in this disparity was believed to be heteronormativity. The percentage of conducting student assessment ranged from 51% in Japan to 100% in Australia and New Zealand, suggesting that the governance system of individual medical schools might have a greater impact than regional factors. Eastern countries effectively managed the inclusion of differences in sex development, sex reassignment surgery, and transitioning but fell short in addressing education related to sexually transmitted diseases and understanding LGBTQ+ community nuances. "Safer Sex" was shown as the most neglected topic, with a disparity of 54%. Clinical training inclusion rates were 58% in Western countries and 9% in Eastern countries, pointing out the lack of clinical competence in LGBTQ+ patient care as a significant barrier to healthcare. A consensus was found on the interest and need for inclusion, with 90% of responses from Western and 96% from Eastern subgroup participants affirming this need.

## Discussion and Conclusions

Medical students have a positive attitude towards LGBTQ+ healthcare education; however, inclusion needs to be improved, particularly in Eastern countries. Additionally, there is a need to increase research in the field to address the gap and create more inclusive healthcare for LGBTQ+ individuals.

## Take Home Messages

There are significant disparities in LGBTQ+ healthcare education between Western and Eastern countries, with medical students feeling under-trained on these topics, highlighting the need for improved education.

**A24SCODSTL02** (2558)**Tonkla Ramathibodi: Impact of an Extracurricular Initiative for Medical Students to Conduct Research**

Tanatuch Tiratrakoonseree<sup>1</sup>, Usanarat Anurathapan<sup>1</sup>, Pongtong Puranitee<sup>1</sup>, Phanuwich Kaewkamjornchai<sup>2</sup>, Thantip Malaisirirat<sup>1</sup>, Varadanu Suriya<sup>1</sup>

<sup>1</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

<sup>2</sup>Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Samut Prakarn, Thailand

**Background**

Faculty of Medicine Ramathibodi Hospital has been encouraging medical students to conduct research by introducing an extracurricular initiative, the “Tonkla Ramathibodi” program, in 2016. This program provides students with direct supervision from the faculties, grants research funds, international presentation travel awards, and publication awards. Our study aimed to demonstrate the program’s impact on medical students’ research productivity.

**Summary of Work**

We identified successfully published articles from our students using the Pubmed Advanced Search from 2011 to 2023. We collected descriptive data from the program on research projects and funded international presentations. Then, we conducted a comparative analysis of research outcomes five years preceding the program and the post-implementation period. Univariate logistic regression was used to compare the outcome with the program implementation, program participation time, and other factors affecting research productivity, including admission track, combined-degree curriculum, and research-integrated curriculum. Then, the program

implementation and the participation time were separately included in multivariate models incorporating other factors with p-values <0.10.

### **Summary of Results**

From 2,917 students, we identified two and twenty-four students who published during pre- and post-implementation, respectively. Significant factors from a univariate analysis included the program implementation ( $p=0.041$ ), program participation time ( $p=0.001$ ), the admission track ( $p$

### **Discussion and Conclusions**

Considering the participation time, the program significantly impacted students' research productivity. While admission track and combined curriculum could play a role, the program effect remained significant even after adjusting with other factors. Other outcomes should also be considered as a substantial proportion of funded research results were still unpublicized or ongoing.

### **Take Home Messages**

The Tonkla Ramathibodi program demonstrated a significant impact on the research productivity of medical students. Similar extracurricular initiatives should be encouraged to establish essential supportive measures for research conducted by medical students.

**A24SCODSTL04** (2403)**Workplace Affordances and Learning Dynamics in a Thai Pediatric Intensive Care Unit: A Qualitative Study of Residents' Experiences**

Jarin Vaewpanich<sup>1</sup>, Kanaporn Trisukhon<sup>2</sup>, Satid Thammasitboon<sup>3</sup>, Samart Pakakasama<sup>1</sup>, Matei Petrescu<sup>4</sup>, Dorene Balmer<sup>5</sup>

<sup>1</sup>Ramathibodi Hospital, Mahidol University, Bangkok, Thailand. <sup>2</sup>Ramathibodi Hospital, Mahidol University, Bangkok, USA. <sup>3</sup>Baylor College of Medicine, Houston, USA.

<sup>4</sup>CHRISTUS Children's Hospital, Baylor College of Medicine, San Antonio, USA.

<sup>5</sup>Perelman School of Medicine at the University of Pennsylvania, Philadelphia, USA

**Background**

Workplace learning in critical care settings is complex and challenging due to the low tolerance for error. The concept of workplace participatory practices, as described by Billett, which involves the interplay between workplace affordances and individual engagement, is relevant to understanding learning in critical care settings, yet it has not been applied in non-Western countries. To fill that gap, we explored how pediatric residents engage in workplace learning in a Thai Pediatric Intensive Care Unit (PICU) and to understand how Thai culture and professional context affords learning opportunities

**Summary of Work**

We conducted the study in a tertiary care hospital in Bangkok, Thailand. Sixteen pediatric residents participated in semi-structured interviews. We used reflexive thematic analysis (Braun & Clark) to describe, analyze and interpret residents experiences of workplace learning, and to capitalize on our own experience as an analytic resource.



## Summary of Results

We constructed themes to represent participants' narratives: one centering PICU cases and context as dynamic affordances; one centering impact of psychological safety; and a third centering the role of attending physicians. Although the affordances of PICU cases and context were not unique, we found that Thailand's collectivist culture contributed to a sense of psychological safety within social and professional hierarchies and set the stage for learning. Attending physicians in the Thai PICU facilitated resident learning by fostering open dialogue, joint problem-solving, and a low-stress atmosphere.

## Discussion and Conclusions

Workplace learning in a Thai PICU, while challenging, is uniquely facilitated by collectivist culture that fosters psychological safety and, combined with effective supervision from attending physicians, optimizes learning. Future research could explore how these findings apply to other non-Western critical care settings and contribute to a more global understanding of workplace learning in healthcare.

## Take Home Messages

\* Effective workplace learning in high-stakes environments, as demonstrated in a Thai PICU, is highly dependent on the cultural context and the type of supervision provided by attending physicians in that context. \* Billett's framework of workplace participatory practices is useful for understanding and enhancing the dynamics of learning in diverse healthcare settings.



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## **EPODASL65** (4072)

### **The situational Judgement Test is a valuable tool for predicting in-training communication skills among pediatric residents**

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#### **Background**

Previous research reported that candidates chosen considering both academic and non-technical skills had better performance than those chosen based on academic qualifications. Due to a limited tool for evaluating non-technical skills during interviews in the selection process, situational judgment tests (SJTs) have been developed. However, there is limited information regarding the relationship between SJTs and multisource feedback (MSF). Since SJTs have not been incorporated into the selection process for Thai pediatric residencies, this study aimed to ascertain the correlations between SJTs and MSF in the context of Thai pediatric residents.

#### **Summary of Work**

The Thai-SJTs had been developed from the Oxford SJT by translation and cross-cultural adaptation followed by content and construct validation. Pediatric residents responded to Thai-SJTs delivered via a Google form. During the training, they were evaluated by faculty, residents, medical students, and nurses using MSF. The SJTs and MSF scores were recorded. The previous traditional interview and letters of recommendation scores were also collected during the selection process.

## Summary of Results

The Thai-SJTs (24 questions) were developed from the Oxford SJT (46 questions). Eighty-seven residents (72 females) participated in the study. The mean (SD) Thai-SJTs score was 77.7 (3.6) %. The Thai-SJTs and MSF scores in communication evaluated by medical students were significantly correlated ( $r=0.263$ ,  $P=0.014$ ), whereas traditional interview and MSF scores were not correlated. Additionally, the letters of recommendation scores were correlated with MSF scores as assessed by faculty ( $r=0.363$ ,  $P=0.001$ ) and residents ( $r=0.468$ ,  $P$

## Discussion and Conclusions

Thai-SJTs demonstrated a correlation with residents' communication skills when interacting with medical students, whereas the interview, recommendation letters, and GPA did not exhibit such a correlation. Within the structured interview, only letters of recommendation showed a correlation with MSF, as evaluated by both faculty and residents, whereas traditional interviews did not display this correlation. However, it is essential to conduct further prospective design studies that integrate SJTs into the selection process and establish correlations with residents' performance throughout all training years.

## Take Home Messages

Thai-SJTs could serve as an additional tool in the selection of candidates for pediatric residency training programs, particularly in evaluating communication skills between residents and medical students.

**EPODASL102** (3673)

## **OKRs Champion Team: Maximizing OKRs Potential in an OKRs-driven Student Organization to Form Unity with Diversity**

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### **Background**

Our student organization, RAMSC, uses OKRs as a steering tool for the whole organization by shaping all member's visions and missions, uniting with great diversity, and formulating passion-driven projects. However, the sophistication of OKRs requires much experience and contextual knowledge to utilize. Thus, the OKRs Champion team was founded to help our members utilize OKRs at maximum efficiency.

### **Summary of Work**

The OKRs Champion team performed 4 vital procedures for the implementation; knowledge sharing workshop, stakeholder analysis, an OKRs accomplishment recognition platform, and the RAMSC's annual summary. Firstly, the knowledge sharing workshop was about utilizing OKRs for 12 representatives from each department, equipping them to formulate the passion-sharing goals from their team's visions. Next, we analyzed and adjusted the OKRs, finding many potential interdepartmental collaborations and leading to the OKRs alignment workshop where the representatives discussed and initiated the potential collaboration towards the shared goal. Later, a monthly loop was implemented, including stakeholder analysis, the recognition platform, and the annual summary. Stakeholder analysis was conducted in private in-depth interviews for the feedback loop development in RAMSC. Then, the platform was for OKRs tracking and

recognizing other member's OKRs accomplishments. Lastly, the annual summary was to continue consistent visions and missions as we planned conducting OKRs next year.

### **Summary of Results**

After the 4 vital procedures, we assessed the team and tool performance qualitatively by in-depth interviews with each representative individually. They share a common perspective on how OKRs formulate their passion-driven goals. However, they also recognized OKRs as a sophisticated and experience-required tool, suggesting the importance of the OKRs Champion team. Quantitatively, RAMSC initiated 34 projects, most are collaborative between departments, and also most OKRs are expected to be 80% complete progress.

### **Discussion and Conclusions**

OKRs implementation helps our student organization to be united and share common visions, leading to a student engagement environment. However, due to the sophistication and experience-required tool, the OKRs Champion team should be invested in any OKRs-centered organization with the qualities of proper experience on OKRs, contextual knowledge, and facilitation skills.

### **Take Home Messages**

Implementing OKRs help an organization be united and engaging. The OKRs Champion team is highly recommended to utilize OKRs at maximum potential.

**EPODASL106** (3946)

## **International medical learners and their adjustment after returning to their home countries: a qualitative study.**

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### **Background**

International medical trainees, including residents and fellows, have to cope with many challenges, such as differences in cultural hierarchical systems, languages, and concern for acceptance. Nonetheless, the need for adjustment perpetuates even after completing the training abroad. When some international trainees return to their home country, they continue to face challenges in adjustment due to the reverse culture shock. Others also need to make many further re-adjustments. This study explores international medical learners' experience in adjusting themselves and coping strategies after returning to their home country after completing their program.

### **Summary of Work**

This qualitative study employed semi-structured in-depth interviews to explore the participants' coping strategies. Participants included international medical learners who were 1) international medical graduates who have already returned to their home country, 2) non-Canadian citizens or non-permanent residents by the start of programs, 3) previously enrolled in a residency or fellowship training program at the

University of Toronto, Ontario, Canada. Data gathering was done through individual interviews. Constructivist Grounded Theory was used for the analysis.

## **Summary of Results**

Seventeen participants were included. Three main themes and seven subthemes emerged from the analysis and are represented by the Ice Skater Landing Model. In this model, there are three main forces in the coping processes upon returning home: driving, stabilising, and situational forces. A sum and interaction of these forces impact their re-adjusting processes.

## **Discussion and Conclusions**

International medical learners who have trained abroad and returned to their home country often struggle with re-adjustment. An equilibrium of the driving and stabilising forces is crucial for a smooth transition. This study's findings should help stakeholders better understand coping processes.

## **Take Home Messages**

As healthy coping processes relate to job satisfaction and retention, efforts to support and shorten repatriation adjustment are worthwhile.



**EPODEM07** (1198)**Outcomes of Graduates Between 2 Different Selection Modules**

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**Background**

Conventional medical student selection uses high scores ranking in general subjects [Biology, Physics, Chemistry (28%); Mathematics (14%); English-language (14%); Thai language (7%); Social (7%)] and subject-specific [Intelligence test (10%); Aptitude test (10%); Medical ethics (10%)]. In 2017, the first cohort using alternative medical selection used Biomedical Admission Testing (BMAT), IELTS, or TOEFL for Portfolio eligibility and multiple mini-interviews (MMIs). A 6-year Medical Curriculum composed of 3 preclinical years and 3 clinical years. All graduates must pass all steps of the National License Examination and they need to practice in the government-related healthcare sector for 3 years including (0) self-repay capital, (1) rural hospitals, (2) medical schools, (3) regional hospitals, and (4) others. This study evaluates the academic performance and choice they chose after they graduated between ones selected by MMIs compared to the conventional method.

**Summary of Work**

Twenty-one graduates selected by MMI (Group A) were compared to 131 from the conventional method (Group B).

**Summary of Results**

The median (interquartile range) of GPA in Group A [3.56 (0.555)], was significantly greater than GPA in Group B [3.47 (0.41)],  $p = 0.03$ . None in Group A chose self-repay capital whereas 4 (3 %) in Group B. Eleven

graduates (52%) in Group A chose rural hospitals; 9 (43%), medical schools; and 1 (5%), regional hospitals compared to graduates in Group B; 34 (58%), rural hospitals; 76 (26%), medical schools; and 13 (10%), regional hospitals; respectively.

### **Discussion and Conclusions**

Graduates from the MMI selection had higher academic performance than ones from the conventional method. They tend to have high social accountability by working in the government-sector health care system.

### **Take Home Messages**

Medical students selected by a conventional method might be replaced with an MMI method.

**EPODFD05** (3187)

## **Barriers to successful Students' Evaluation of Teaching (SET): multi-stakeholder perspectives and systems thinking**

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### **Background**

Ramathibodi Medical School, Thailand, along with other global medical institutions, has been incorporating Students' Evaluation of Teaching (SETs) to evaluate the performance of educators. However, our school continues to face challenges in meeting the adequacy of feedback received from students, encompassing both the quantity (response rate) and the quality of evaluations, despite the implementation of various solutions. This indicates a distinctive and complex challenge within our medical school environment, underscoring the need for a more in-depth analysis. We employed a systems thinking approach to comprehend and address the underlying factors influencing the unsatisfactory SETs.

### **Summary of Work**

We conducted focus group discussions to collect qualitative data, which aimed to ascertain the existence of the problem from students engaging in systems and gain comprehensive perspectives from stakeholders consisting of student representatives, lecturers, and academic officers (n=14). Participants were purposively recruited. Thematic analysis was performed to generate emerging

themes and synthesize them into a causal loop diagram.

### **Summary of Results**

We considered "Adequacy of Feedback Data" as a primary variable. Implementing SETs reveals the mismatch in perceived purpose: formative and summative. Educational personnel prioritized the summative purpose, which required a higher rate of response and led to punishment or rewards for medical students. Meanwhile, medical students recognize the formative purpose and are more inclined to complete questionnaires only if feedback data is used to improve the curriculum. The discrepancy influenced the negative behavior of responding to the questionnaire and exacerbated the quality of the data. The existing solutions bear a resemblance to the system archetype "Fixed that Failed," when the solution fails to alleviate the condition and causes unintended consequences.

### **Discussion and Conclusions**

We could imply SETs system instability and reveal causation underneath. Also, our investigation revealed the complexity of the problem rather than its linear simplicity. The "Mismatch Trap," infrequently mentioned in literature, has been imprinted in systems and requires elaborative exploration to be identified. This key component is hypothesized to be the leverage point, thus solving the problem with it along with other auxiliary variables is recommended.

### **Take Home Messages**

Systems thinking is a robust tool, as exemplified in this study of SET, to decipher the complex systems in medical education.

## ePosters OnDemand - Sustainability and Global Health

**EPODSGH01** (3501)

### **"True Success for Mankind": The Prince Mahidol Award Youth Programme (PMA-YP) fosters Thai medical graduates to tackle global health challenges.**

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#### **Background**

Prince Mahidol Award Youth Programme (PMA-YP) is a competitive, nationwide scholarship in Thailand for passionate medical students to research in medicine and public health for 12 months following graduation. Aiming to honour HRH Prince Mahidol of Songkla, the Father of Modern Medicine and Public Health of Thailand, and inspire medical students to dedicatedly improve the health of all mankind in an increasingly interconnected world. Up to five scholarships have been awarded annually to selected medical students since 2009. The initiative provides funding and short-term opportunities for scholars, but it also uses "lifetime mentoring" to promote post-scholar careers from international and local exemplars to guarantee a long-term impact on local and global health. This study examines how the PMA-YP has affected medical students' globalisation and post-scholarship careers.

#### **Summary of Work**

Our work encompasses the characteristics of award recipients over 14 years of the programme (2009–2022), as well as their careers after receiving the awards. This

was achieved by reviewing secondary data and applying descriptive statistics. Thematic analysis was used to investigate the types of projects that recipients proposed for grants.

## Summary of Results

A total of 68 scholars' database were analysed. 35 conducted basic science and clinical research, while 25 engaged in research focused on health systems and communities. Two individuals performed medical education research, while six did AI in healthcare research. The recipients spent their 12-month research experience in eight countries with their international mentors. Most alumni pursue their career paths domestically as medical educators, researchers, or public health professionals, of which eight are employed as researchers at globally renowned institutions.

## Discussion and Conclusions

PMAYP provided opportunities for invaluable experiences for scholars and supported a long-term career path, predominately as medical educators, that would influence both Thailand's healthcare system and medical education, as well as accelerate Thailand's contributions towards global health challenges. Only a decade and a half has passed; tracking the impact of alumni on national and global development in healthcare should be further conducted.

## Take Home Messages

"True success is not in the learning, but in its application to the benefit of mankind," a quote provided by HRH Prince Mahidol of Songkla reflected the resolution of PMAYP.

**EPODSGH03** (3164)

## **Decolonizing global health through introducing global health to undergraduate medical students in middle-income country context**

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### **Background**

Initiated by 'Western, high-income countries,' global health aimed to promote public health in lower- and middle-income countries (LMIC) through donor-recipient relationships; therefore, their education and practice primarily center on former colonial nations. Decolonizing global health requires global involvement from the medical community. In Thailand, medical education, adopting Flexner's report, spans a six-year curriculum, with some integrating health systems science. However, the notable absence of global health education in Thai undergraduate medical programs calls for improvement. This study evaluates global health comprehension in medical students participating in pre-global health modules and the Prince Mahidol Award Conference (PMAC), an international conference on global health, as rapporteurs.

### **Summary of Work**

Sessions on Introduction to Global Health, Global Health Governance, Commercial Determinants of Health, and Decolonizing Global Health were organized didactically

in a hybrid mode by partnering with the International Health Policy Program (IHPP). Discussions on assigned academic articles were arranged to equip medical students with background knowledge of global health. Students were selected to be rapporteurs at the PMAC objectively to enhance their learning experience. Students participated voluntarily, and open-ended reflections were encouraged before and after the program. The characteristics of enrolled students were collected and analyzed by descriptive statistics. The responses of open-ended reflections were analyzed by thematic content analysis technique.

### **Summary of Results**

Twenty preclinical and clinical medical students, participated, with 17 of them lacking prior exposure to global health have seen its importance to obtain health for all, and eager to explore global health further by being aware of current issues. After the PMAC, additional elements of global health knowledge were acquired. The five common themes—1) Local and global knowledge exchange, 2) Youth advocacy, 3) Decolonization of Technology, 4) Global Health Education, and 5) Career aspirations—were analyzed through thematic analysis.

### **Discussion and Conclusions**

Participating in global health lectures, discussions, and activities has deepened students' understanding of global health and the youth's role in decolonization efforts. Therefore, medical schools should introduce global health to encourage broader engagement from the medical community.

### **Take Home Messages**

It is not too early to introduce global health to undergraduates, and in the context of LMIC, it would be a good step to decolonize global health.



## **EPODTFL28** (2900)

### **How to maximize the use of simulated patients in rehabilitation medicine setting: perspective of instructors and learners**

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#### **Background**

· As tertiary care, cases found in Ramathibodi Hospital are complicated. This occasionally leads to a lack of suitable cases for medical students. Thus, standardized patient (SP) is beneficial especially when patient cases are unavailable. · This study seeks to understand instructors' perspectives about maximizing the utilization of SP in Rehabilitation Medicine and match them with learners' perspectives to enhance their learning experience.

#### **Summary of Work**

· Across the academic year of 2022, we interviewed instructors from the Department of Rehabilitation Medicine about their perception of SP, its implementation, and its effectiveness. · Data analysis for this study was done using thematic analysis.

#### **Summary of Results**

· Most instructors agree that SP is a serviceable tool for achieving learning objectives. Skills practiced in class could translate to clinical experience, namely, history taking

and physical examination, albeit with some limitations. SPs are required to improvise when students approach the case beyond the assigned script, and some physical signs cannot be simulated convincingly. This correlates with concerns of a group of medical students that the inauthenticity of SP, including unrealistic or incomplete patient history, unnatural physical signs, and impact of the condition, can lead them to make false impressions of the disease, affecting them in the long term as medical professionals, as one of the ways medical students learn is via recognizing patterns.

- To maximizing the benefit of SP, most instructors commented on developing comprehensive scripts and rehearsals. SP who had experience on taking care of a real patient with a similar condition, was able to play the role and give more realistic answers to students' questions.

## **Discussion and Conclusions**

- \* SP could be a serviceable method of education in clinical years but with some limitations. This study helps us identify factors involved in and how to enhance learning using SP from the staff perspective.

## **Take Home Messages**

- \* SP has usefulness in specific contexts. It can provide a comparable experience and answer learning objectives when patients are unavailable.