To go or not to go: expectation, decision-making and outcomes of international exchange program participation in Chinese medical students

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Background: Medical students in China show increasing interest in international exchange and various exchange programs offer more training opportunities. But little is known about students' expectations, nor outcome evaluation. This study aim to investigate the expectation, decision-making factors and outcomes of the exchange programs in China from the students' perspective.

Method: This study was a cross-sectional online survey in China among eight-year-program medical students from 13 medical schools.

Results: 735 students participating in the survey with 92.4% reported a desire to participate. 268 students replied participation in exchange program and 62 students who did not participate in exchange were trained in China when their peers were in international exchange.

Most students prefer to participate in exchange during internship years with duration over 3 months. 49.6% of students prefer to clinical training, 44.6% to research training and the others (5.7%) to non-clinical or interdisciplinary major. The expected cost are less than $800/month (53.5%) or $800–1600/month (27.2%). The top 3 contributing factors desire to learn advanced medical techniques, professional skill advancement and job/grant application. Most students intend to exchange to high socio-economic and healthcare level countries (78.6%).

While the top 3 factors frustrating their participation are expense, preference to improve clinical skills in home country and language barrier. Skills, e.g., professional skills, learning competency, and career/education planning etc., were evaluated. Students after exchange reported a significant increase in the skills and were more likely to apply for postgraduate education abroad, while the counterparts showed no significant increase in skills except in professional skills.

Conclusion: This study is the first student-based study to investigate expectation, decision-making factors and outcomes of exchange programs in China. In the study, students show preference for long-term exchange to high socio-economic countries with clinical or research training. And the exchange programs contribute to increase in student competency and education/career planning among Chinese medical students. Improvement to exchange programs should be based on need and goals of medical student training. Quality of exchange and evaluation to outcomes should outweigh the mere number of exchange programs.

Medical education tourism: intention of European medical students who participate in clinical elective programmes in Sri Lanka

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Background: Many European students come to Sri Lanka to study clinical subjects in Sri Lankan Medical schools as an elective option. Since Sri Lanka is a famous tourist attraction in the region, touristic interest influences the students' selection of Sri Lanka. There is a concern among clinical teachers in Sri Lanka that touristic interest may undermine the learning interest of these students.

Method: The aim of this study was to explore the expectations of these students and motivation of selecting Sri Lanka. This study was conducted using a questionnaire to assess the aim of these elective students and activities planned by the students who came to Ruhuna Medical school in Sri Lanka. They were given the opportunity to prioritize their expectations.

Results: Two hundred students participated in the study. Students are mainly from German (51%) and UK (39%). Most popular subjects were surgery (46.3%) and pediatrics (11.5%) and if there is a combination, majority had surgery as a subject. Two main reasons for choosing the subjects are more clinical exposure and personal interest. Two main reasons for selecting Sri Lanka for their elective programme were aesthetic value of the country and to compare healthcare setting with their native country. Majority (54.5%) mentioned that getting exposed to a different clinical setting as their first priority while 23% had stated that travelling through the country as their first priority.

Discussion: Reason for higher interest on surgery can be due to more surgical exposure these students get in Sri Lanka such as opportunity to assist the surgeons compared to their parent countries. While majority of students come to Sri Lanka to get clinical exposure in a different healthcare setting, considerable number of students come to Sri Lanka for tourism. Therefore administrators in both parent and host medical schools should pay attention to this fact when they plan elective programs.

Conclusion: European medical student select clinical subjects in Sri Lanka as an elective option with educational as well as touristic intention.
8EE3 (1550)
Medical Development in Europe – ten years’ experience of multinational teacher-initiated course

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Background: Internationalization is a valuable part of medical education. There are several multi- or bilateral programs for this but many students remain doubtful and do not do exchange studies or just cannot be abroad for several months or at very distant locations. To offer the possibility of international experience in a compact format and to highlight the vast possibilities in Europe regarding work, research or studies we initiated this course.

Method: In 2007 we visited a number of medical universities in Europe to suggest an elective course spanning three different regions and universities, each site offering one week of studies. Two universities in eastern/central Europe (the Medical University in Kaunas, Lithuania and the Jagellonian University in Krakow, Poland) and two universities in southern Europe (the University of Florence and the University of Cagliari, both Italy) were selected. One course plan was formulated and accepted at each site with common learning objectives focusing on Internal Medicine and Public Health. The supercase method (e.g. Gyllenhammar et al, AMEE 2006) was the pedagogic method... The course had a first week at the Karolinska Institute in Stockholm and then 1 week each in two of the other universities. It has been given twice a year since May 2008.

Results: The first course had only 8 participants but was enthusiastically received. The applications increased rapidly to a maximum of 52. We found that the teachers at each site were very positive and students performed well in exams. Student evaluations were generally very positive highlighting the experience of working in multinational groups.

This model is easily reproducible and we found cooperation, logistics and administration manageable and learning outcomes very good.

Conclusion: The concentrated exposure of the students to cooperation with international students working intensely for 3 weeks in English and experiencing different European medical and social cultures and interpretations of the common course plan proved very rewarding for students and teachers alike.

Take-home message: You can achieve very good internationalization outcomes also from short intensive multinational courses.

8EE4 (1376)
Academic achievement and stakeholder satisfaction on expected learning outcomes of the graduates from the Srinakharinwirot University–University of Nottingham Joint Medical Programme

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Background: The Srinakharinwirot University – University of Nottingham joint medical programme in Thailand was retrospectively collected from the medical education data center. Employer feedback on the graduates' performance has been assessed using the questionnaire. The expected learning outcomes of the graduates including moral, knowledge, wisdom, interpersonal relationship, mathemetic, communication skill, managerial skill, and professionalism.

Results: The mean GPA of the graduates was increased from 3.0 in year 2015 to 3.23 in year 2016. Employer satisfaction on the expected learning outcomes increased in all subscales from year 2015 to year 2016. The highest score was the moral subscale (4.71 in 2015 and 4.74 in 2016) followed by communication skill (4.60 in 2015 and 4.71 in 2016) and professionalism (4.55 in 2015 and 4.69 in 2016). The lowest scores were in the managerial skill (4.32 in 2015 and 4.50 in 2016) and wisdom subscale (4.40 in 2015 and 4.56 in 2016). We did not found significant correlation between the GPA and the employer satisfaction on the expected learning outcomes of the graduates.

Conclusion: The academic achievement and employer satisfaction of the graduate from the Srinakharinwirot University – University of Nottingham joint medical programme were in the high standard level.

Take-home message: The academic achievement and employer satisfaction of the graduates from the Srinakharinwirot University – University of Nottingham joint medical programme were in the high standard level.
An Innovative Programme to Support Refugee International Medical Graduates

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Background:
Refugee and Asylum Seeker Centre for Healthcare Professionals Education (REACHE) North West has been supporting refugee health professionals entry into NHS work since 2003. Just under half of doctors supported by REACHE who are registered with the General Medical Council (n=196) are in specialist or GP training posts. A REACHE North West programme, Clinical Practical Training (CPT), provides 3 months adaptation to UK practice and although following this all doctors entered paid NHS employment, this was mainly in short term non-training posts in which they were unable to get their F2 competencies signed off. Without this they are unable to enter GP or specialist training in the NHS. Refugee doctors are at additional disadvantage competing with UK or International Medical Graduates for NHS training posts because:
- Lack of exposure to NHS General Practice either at undergraduate or foundation level disadvantages them in the application process for GP specialist training.
- They may have long career gaps on their CV due to their experiences as a refugee or asylum seeker.
- With the support of the Salford Royal NHS Foundation Trust (SRFT) stroke team, REACHE doctors were able to enter 1 year junior clinical fellow posts after their CPT with support to achieve F2 competencies sign off.
- 9 doctors achieved F2 competencies - 2 of them have started GP training and 1 has applied this year. 2 are currently applying for specialist training and 2 have unsuccessfully applied.
- Barriers to specialist training still remain. This programme has been developed further - a rotational junior clinical fellow programme has been established to provide doctors with wider experience as well as to fill junior post gaps across a number of specialties within the Trust. These posts are currently filled by locums which has an impact on financial status, quality of patient care and morale of existing staff. 4 months of GP training is being incorporated into these posts.
- Refugee doctors in the UK require additional training and support to increase their contribution to the NHS in specialist or GP roles.

Internationally Educated Healthcare Professionals: Supporting transitions to new healthcare environments

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Background: ‘Internationally educated healthcare professionals’ (IEHP) describes multi professional healthcare workers who cross international borders in order to work within different healthcare environments. UK healthcare relies heavily on IEHPs, but in the wake of the BREXIT referendum, institutional reports highlight falling numbers of employment applications from abroad.

Method: We report a descriptive review of empirical research literature about IEHP transitions. Analysis of these publications identified a wide range of approaches to examining this topic with most reports focusing on professional experiences. Other papers reported IEHP learning resources, patient mortality, organisational experiences, licensure requirements, examination performance and success at appointments to training positions. From these we propose a model with 3 areas of focus that could inform future IEHP curriculum development programs.

Results: Our review identified 28 key papers. These varied greatly in their contribution to the discourse of IEHP transition so a 3-level traffic light classification was developed though which papers were assessed for quality:
- Papers were classified into ‘green’ high value studies, ‘amber’ intermediary value studies or ‘red’ low value studies. This was a subjective judgment based on the content of these papers (context, methodological approach and what they add). The discussions from these papers varied greatly but most explored the importance of setting specific approaches to assisting IEHP transition.
- Conclusions directed towards the development of site-specific curricula for IEHP transition with focus on 3 important areas: organisational support, supported training and individual attributes.
- Identified literature was used as a basis to form a traffic light system for informing three areas when considering future IEHP curricula to support transitions across international healthcare systems.

Conclusion: Empirical research examining transition of IEHP into destination healthcare environments is heterogeneous and high quality studies examining this area are lacking despite the high levels of scrutiny recently. Published literature relating to IEHP varies greatly. Results from this approach signpost to site-specific curricula supporting transition.
Employing new approaches to teaching can ensure that learners are familiar with the skills and competencies for global health work.

**8EE8 (111)**  
**Medical Education in a Global Context**

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**Background:** The Accreditation Organisation of Netherlands and Flanders (NVAO) is the first EQAR (European Quality Assurance Register for Higher Education) registered quality assurance agency that participates in the Recognition Programme of the World Federation for Medical Education (WFME). NVAO applied for recognition upon request of the medical schools in Netherlands and Flanders.

As of 2023, physicians applying for ECFMG (the Educational Commission for Foreign Medical Graduates) certification will be required to graduate from a medical school that has been recognised as working according to the WFME standards. These standards have been endorsed by the World Health Organisation (WHO). The WFME Recognition Programme offers accreditation agencies such as NVAO the opportunity to undergo an evaluating and recognizing process. Graduates of medical programmes accredited by NVAO will meet the ECFMG criteria once NVAO is recognised by WFME.

ECFMG certification allows international medical graduates to enter US medical education. It is also a requirement to take Step 3 of the US Medical Licensing Examination (USMLE) and to obtain a license to practice medicine in the US.

The WFME Recognition Programme relates to basic medical education i.e. the bachelor and master programmes in medicine. ‘Medical schools’ in the WFME and ECFMG documents can be interpreted as ‘medical programmes’ depending on the context. For NVAO that would be the case as not the schools but the programmes are being accredited.

NVAO applied in August 2017 and is expecting the WFME recognition decision by mid 2018, in time for the AMEE conference.
Palestinian Anesthesia Teaching Mission (PATM): an ongoing academic partnership in area of conflict with deprived resources

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Background: Anesthesia Teaching Mission has been running since 2014 as a partnership between the UK based charity IMET2000, the World Federation of Societies of Anesthesiologists (WFSA), the Palestinian Ministry of Health (MoH) and the Palestinian Society of Anesthesia (PSA). The goal of the mission is to provide educational support for anaesthesia trainees in Palestine. This article describes a strategy in capacity-building in a developing country by establishing unique partnerships between academic partners in the developed world.

Method: Volunteer teachers are recruited from anaesthesia training centres in the developed world by WFSA. IMET2000 organises the teaching activities locally and provides logistic support. PSA and MoH ensure trainees’ time protection and availability for training. Volunteers typically spend one month teaching trainees both in the operating room (hands on) and in the classroom (didactic). Feedback on trainees’ satisfaction was collected using a structured 10-item questionnaire.

Results: To date about 20 anaesthesiologists from 6 different countries have volunteered in East Jerusalem and the West Bank. Collecting feedback on the activities, 42 Participants have completed the questionnaire 36% are specialist, 64% are residents. 38 % and 52 % of the participants rated the covered materials and Excellent and good, respectively. Similarly, 31% of the participants rated the trainings as excellent at meeting their needs and 55% said it was good. Virtually all the participants indicated that PATM is very much needed and have reported high level of satisfaction with it.

Conclusion: The medical education and training needs in Palestine are far beyond what the Palestinian Authority can cope with. PATM is relatively cheap academically based model that helped enhance training opportunities, expanded trainees practical experience and skills and strengthen stakeholder collaboration. Further research is needed to determine the long-term impact on anaesthesia training and disease burden.

Funding: IMET2000-PAL
Contributors: IMET2000, WFSA, MoH and PAS.

Using a High-Fidelity Simulation Transition Course to Prepare International Doctors with Technical and Non-Technical Skills when dealing with Common Medical, Ethical and Legal Challenges in the National Health Service

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Background: Retrospective studies show that doctors trained outside of the UK (UK) are more likely to require General Medical Council (GMC) performance assessments than UK-trained doctors. The reasons for this discrepancy are unclear, but it reinforces the need to address staff induction and training. A high-fidelity simulation programme was accordingly created to prepare this cohort with technical and non-technical skills when dealing with common clinical and ethico-legal dilemmas.

Method: From an extensive survey of overseas doctors, five work-based challenges were identified which were not covered in local induction. These were generated into high-fidelity simulation scenarios and incorporated ethico-legal issues within a medical emergency. For example, candidates had to review escalation plans in a critically unwell patient without mental capacity.

We piloted this one-day course to ten international doctors. Evaluation was collated using a questionnaire with a mixture of open and closed questions graded on a 6-point Likert scale.

Results: The feedback received was positive with 100% of candidates stating the scenarios were clinically relevant and realistic. A common theme amongst all candidates was the appreciation of non-technical skills particularly situational awareness and task management. All candidates felt more competent in dealing with ethico-legal issues within a medical emergency. 100% candidates agreed that the course was a necessary adjunct to trust induction, and felt “more confident commencing a job in the National Healthcare Service (NHS)”.

Discussion: The course highlights a gap in the training associated with the transition of overseas doctors to the NHS. A significant proportion felt under-prepared on commencing a job in the UK and emphasised cross-cultural disparities when dealing with certain medical and ethical scenarios. Post course, all candidates felt more prepared commencing their job, and agreed that simulation should supplement generic induction.

Conclusion: High-fidelity simulation empowers overseas doctors in managing difficult ethico-legal scenarios in a safe learning environment. Many candidates had no prior simulation-based training, but it proved a vital adjunct in their induction.
8EE12 (2930)
Exploring risks of international handover and training needs of healthcare professionals in a European border region

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Background: In the Euregion Meuse-Rhine (EMR) three countries meet: Germany, Belgium and Netherlands. Patients crossing borders for healthcare occurs regularly, and is expected to expand due to increased mobility of citizens and centralized expertise of healthcare professionals. This results in increased international patient handover. International patient handover is assumed to be increasingly complex compared to national handover. However, it remains unclear what major patient-safety risks of cross-border transfers and specific training needs of healthcare professionals in border areas are. The aim of this study is to investigate perceived risks and training needs of healthcare professionals regarding cross-border patient handover.

Method: We performed an exploratory survey study. A total of 846 healthcare professionals working in one of four large hospitals or for one of the regional emergency services in the EMR completed a survey about international patient handover in this border-region. Qualitative responses concerning patient-safety risks and training needs in the context of international patient handover were thematically analyzed to identify semantic themes.

Results: Of the 846 healthcare professionals who responded to the survey, 30% reported to be involved in at least one cross-border handover in the last month. Risks mentioned by healthcare professionals regarded awareness, communication, competency, facility, and information. General solutions for these risks regarded communication, facilities, shared standards, and training. When asking what training is needed to optimize international handover, language courses, training standardized processes and joint training were suggested. In the EMR, awareness, communication, competency, facility, and information are perceived as risks for patient safety during international handover. In order to overcome these risks, training aimed at standardized processes and language in joint settings is desired. This will facilitate a shared understanding of the process of cross-border handovers. It is important to further investigate training needs in settings in which frequent and/or systematic cross-border handover occurs, and eventually develop training that addresses healthcare professionals' needs.

Conclusion: If relevant, healthcare professionals should be trained for international patient handover. Training should address standardized processes and language, and should be provided in a joint setting.
Background: Globally connected teams and an increasingly global labor market with professionals and patients on the move highlight the importance of international collaboration. The IMPECD-project funded by Erasmus+ aims to improve online international collaboration competences by offering an online course with clinical patient cases for collaboration.

Method: A pilot test with students of four European countries answered the question how learners experience the online learning environment, and where they see potential for learning online international collaboration competences. Five clinical cases, based on real patient cases, were collaboratively solved in small groups of five undergraduate nutrition and dietetic students (N = 25). An international setting was ensured by group allocation: each group consisted of at least one student from Austria, Belgium, Germany and Netherlands. The five groups were observed and guided by researchers while the students actively solved the clinical cases. Usability and User Experience were evaluated by an online questionnaire.

Results: Students experienced the online course as exciting, motivating and innovative, 60% would like to be frequently involved in similar online courses. More than half of the participants (56%) believe that the online course will improve their international collaboration between colleagues. Collaborative tasks for dietetic diagnosis, therapy planning and monitoring, and outcome evaluation seem most beneficial for solving the clinical cases, since these tasks are very challenging for students. English as medium of instruction is challenging for 64% of the students, which could hamper the acquisition of online international collaboration competences. The course was well received, as it identified and addressed a need for innovative ways of training online international collaboration competences. The results will be used to re-design and improve the online course, focusing on methods to acquire online international collaboration competences. The re-designed course will be tested in a second research cycle in June 2018.

Conclusion: Providing a new learning environment for international online collaboration competences was highly appreciated by students. The online course provides an excellent 'best practice' that the participating Universities can use when designing and providing innovative online learning environments for their students.
• Improving the induction program and tailoring towards IMG’s specific needs.
• Development of an educational package for IMG.
• Raising institutional awareness for the difficulties faced by IMG.
• Continuous monitoring through collection of data.

International medical graduates face multiple challenges when moving to the UK. A strategy to assist with integration is required and is best developed according to the particular healthcare environment.

8EE15 (2485)
Development of an Advanced Pediatric Life Support (APLS) Simulation Training Program in Bhutan

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Background: Early recognition of critically ill children is known to improve outcomes. While multiple courses have been created to improve care of seriously ill children, little is known about the impact of these in-service training courses in low and middle-income countries. World-wide, Advanced Pediatric Life Support (APLS) is considered the primary curriculum for recognition and resuscitation of emergently ill pediatric patients. Establishing a locally relevant, simulation-based Advanced Pediatric Life Support (APLS) train-the-trainer curriculum to teach healthcare providers in Bhutan to recognize and stabilize acutely ill infants and children could impact clinical outcomes in this remote and limited-resource country.

Method: This study will evaluate whether a APLS simulation train-the-trainer curriculum tailored for implementation in Bhutan will assist local healthcare providers to recognize and stabilize acutely ill infant and children, to develop a sustainable training network, and subsequently to improve pediatric resuscitative care in healthcare facilities in Bhutan. An APLS course was conducted in March 2016. Study objectives were to evaluate knowledge translation, pilot a clinical utilization tool to assess use of APLS-structured thinking, and identify course content needing revision. Pre- and post-test scores evaluated knowledge translation. Post-course surveys assessing clinical preparedness and post-course utilization of an APLS structured approach to critically ill pediatric patients are being conducted. Course quality was assessed using participant evaluations and comparison of pre-and post-test scores.

Results: Fifteen providers participated including all pediatricians and pediatric residents in Bhutan, as well as all general duty medical officers from the Jigme Dorji Wangchuck National Referral Hospital. Pre- and post-test identified knowledge gaps and improvement in APLS key-concepts. A revised APLS course will be presented with locally-trained facilitators in April 2018.

Conclusion: The APLS course prepared participants to practice using APLS structured thinking and to facilitate a regional rollout of the training course. Next steps include developing a program for the monitoring and evaluation of regional hospital rollout trainings and a mechanism for mentoring the growth and sustainability of the training network.

Take-home message: Lessons learned from this pilot project can be used for developing effective in-service training service training programs in low and middle-income countries.