# 'Sink or Swim?' – Preparing medical students for International Elective projects

Stephanie Stone[1], Jolene Moore[1], Sam Tweed[1], Elaine Lyall[1], Amudha Poobalan[2]

[1]Institute of Education in Medical and Dental Sciences, University of Aberdeen; [2] Institute of Applied Health Sciences, University of Aberdeen

## Introduction

International Medical Electives (IMEs) are popular, and form an integral part of the global health curriculum[1]. Forty percent undertake their IME within resource-constrained settings[2], however there is a need for greater reciprocity and collaboration between local and host institutions to ensure mutual benefit[3][4]. Uniquely within the University of Aberdeen (UoA), all students are required to undertake a project during their elective. Project proposals are submitted 7-14 months prior and an interview undertaken to ascertain project viability and ethical approval. In line with Medical Schools Council guidelines[5], we used a mixed methods study ('Sink or Swim?') to evaluate the experience of IMEs from the perspective of students and their host supervisors.

## Methods

Final year MBChB students undertaking an IME between January and May 2018 were invited to complete a pre-IME questionnaire, a reflective diary, and participate in a post-IME focus group. Host supervisors were invited to complete an online questionnaire. Quantitative questionnaire data was analysed descriptively. Reflective diary and focus group transcripts were reviewed independently to identify emerging themes.

## Results

Nine (out of 41 eligible) students and five host supervisors participated in the study. Most students were female, undergraduates and identified as 'white British'. All students were UK residents and under 30 years of age. Five students undertook an IME in a low or middle-income country (LMIC). Qualitative themes are presented below:

### Student preparation for the elective project

All students had conducted an audit or research project prior to their IME, however student concerns predominated around their project. Not all who required ethical approval had received training in research ethics, and the responsibility for guaranteeing approval appeared to be left to student.

> "I asked my, the [electives] company whether I needed it [ethical approval], and they said they'll sort it for me… I don't really know if I got it or not but no one ever said"
> (007 LMIC)

### Communication with host supervisors prior to IME

Most students did not undertake an IME in an institution with a long-term partnership with the UoA and 2/3rds were unable to contact their host supervisor before arrival. All students and host supervisors from LMIC would have preferred better prior communication, particularly to facilitate project planning.

> "…[my host supervisor] never replied… because they just don't use email very frequently there"
> (002 LMIC)

> "Because…of doing the project…it's probably more important to have contact beforehand"
> (006 HIC)

Most students self-proposed a project or in collaboration with their UK-based electives supervisor. Some host supervisors expressed a preference for greater involvement in the project design, and for those who were unable to collaborate with their host supervisor before arrival found there was often a need to change their project plans upon arrival. Although most host supervisors would prefer a long-term elective partnership with the UoA, students preferred organising their IME independently.

> "I realised on day 1 that my proposed project was totally unsuitable" (003 HIC)
> "I had to change mine [project] entirely" (005 LMIC)

> "I think doing it by yourself gives you like a bit of independence…I'm actually quite proud of myself"
> (003 HIC)

### Conducting an elective project during IME

Students found data collection in a different environment challenging, and students visiting LMIC required greater administrative support.

> "Wifi wasn't a thing… so I would spend like 3 hours at the computer and get like a page done"
> (002 LMIC)

> "The whole experience has been chaotic and stressful…Trying to collect complete data sets and minimise loss to follow up is so much more difficult here than in it is in the UK"
> (005 LMIC)

Some host supervisors had a different perspective from students regarding the project, which created conflict between host and students in some LMIC settings. Most students did not complete their report in the 8-week elective, leaving some students unsure how their project report would be received by their host.

> "The head of department was like…'we don't want that [the project] to reflect badly on our department'…My hospital was very against the idea of me doing a project "
> (002 LMIC)

> "I don't think they were too happy with that [the project report findings]. But I haven't heard back from them"
> (007 LMIC)

> "The Hospital would appreciate if the time frame…will allow [students] to collate and finalise data while on placement and present it to the department for discussion and learning"
> Host Supervisor (LMIC)

### Value of conducting an elective project

Both students and hosts were divided regarding the benefits of conducting a project. Students who could see that their project was valued by their host felt a great sense of achievement. All host supervisors found the project of interest and most felt it was of use to their department. Students who did not consider the project beneficial, were also those who faced difficulties collaborating with their host supervisor.

> "I can't help but resent having to do it [the project]….and feel it is hanging over me and will detract from…clinical opportunities"
> (003 HIC)

> "They were like 'we're going to push this through, this is really important for us…' They benefitted, and I definitely benefitted…so it was sort of 'win-win'"
> (001  HIC)

> "This [the project] is a very positive thing as it helps focus the student. At times…they tend to be more of tourists and less medical students"
> Host Supervisor (LMIC)

> "it's unrealistic to complete a substantive project in only a few weeks. It becomes a make-work compliance exercise"
> Host Supervisor (HIC)

## Discussion

Planning and conducting a project within student IMEs posed specific challenges. Effective communication to allow collaboration was valued but not achieved by the majority. Uncertainties existed in the acquisition of ethical approval, and data collection within unfamiliar systems, which resulted in a greater administrative burden for LMIC host institutions. Value from the projects undertaken appeared dependent upon mutual benefit and engagement. In addition, conducting a project brought some students in conflict with their LMIC host.  Although numbers within this study are small, the importance of mutuality in research conducted whilst on IME is concordant with the literature, and important considerations for future practice have been highlighted.

References:
1) Sawatsky et al. (2019). Eight years of the Mayo International Health Program: what an international elective adds to resident education. Mayo Clinic Proceedings, 85(9), 734–741.
2) Dowell & Merrylees. (2009). Electives: isn't it time for a change? Medical Education, 43(2), 121–126
3) Crump et al. (2010). Working Group on Ethics Guidelines for Global Health Training (WEIGHT). Ethics and best practice guidelines for training experiences in global health. The American Journal of Tropical Medicine and Hygiene, 83(6), 1178–1182.
4) Bannerman et al. (2015). Medical electives in sub-Saharan Africa: a host perspective. Medical Education, 49(6), 623–633
5) Wiskin et al. (2017). Recommendations for undergraduate medical electives: a UK consensus statement. Medical Education, 1–10.

## COME HERE. GO ANYWHERE

Globe image from: https://commons.wikimedia.org/w/index.php?curid=70171