

'Sink or Swim?' results. Considerations for International Medical Elective projects at the University of Aberdeen

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Introduction

International Medical Electives (IMEs) are popular and beneficial for students, and form an integral part of the global health curriculum^[1]. Understanding health and patient experience from a global perspective is essential for graduating doctors, and medical education aims to foster ethical values within students^[2]. Forty percent of students choose to undertake their IME within resource-constrained settings^[3], however IMEs that focus primarily on outcomes from the perspective of visiting students may not sufficiently consider the hosts' perspective and result in unintended harm^[4]. Medical schools can do better to prepare students logistically and ethically for their IMEs^[5] and guidelines for ethical engagement have been proposed^[6]. In addition to pre-departure training, there is a need for greater reciprocity and collaboration between local and host institutions to ensure mutual benefit from any projects undertaken during the elective^{[7][8]}. Uniquely within the University of Aberdeen (UoA), all medical students are required to undertake a project during their elective. Elective project proposals are submitted 7-14 months prior to IMEs and an interview undertaken to ascertain the project viability and the need for ethical approval. In line with guidance from the Medical Schools Council^[9], 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 students undertaking an IME at the UoA between January and May 2018 were invited to complete a pre-IME questionnaire, a reflective diary during their IME, and participate in a post-IME focus group (FG). Host supervisors were invited to complete an online questionnaire. Quantitative data from questionnaires was analysed descriptively. Reflective diary and focus group transcripts were reviewed independently by 4 researchers to identify emergent themes.

Results

Nine (out of 41 eligible) students completed a pre-IME questionnaire, six completed reflective diaries, and seven participated in a FG. Five host supervisors completed the online questionnaire. Most students were female, undergraduates and identified as 'white British'. All students were UK residents and under 30 years of age. Five undertook an elective in a low or middle-income country (LMIC).

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.

"There's just not very much guidance...about what was expected from the project what you were required to do, so that made it quite hard, when you are trying to communicate with people on the other side of the world" (006 LMIC)

"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)

Two students knew they needed ethical approval prior to undertaking their IME, but only 1 had received training within research ethics. The responsibility for ensuring ethical approval was in place appeared to have been left to the students.

Communication with host supervisors prior to IME

The majority of students undertook an elective within an institution that did not have a long term partnership with the UoA, and 2/3rds of students were unable to contact their host supervisor directly before starting their elective.

"I did get one [consultant's email address], but she never replied and she said 'oh I don't check my emails' because they just don't use email very frequently there" (002 LMIC)

All host supervisors from LMIC would have preferred better communication with their student prior to the elective. Students also felt that greater communication would have been beneficial, particularly for arranging and planning their project.

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

"I realised on day 1 that my proposed project was totally unsuitable" (003 HIC)

"I had to change mine entirely" (005 LMIC)

"I think they might have been more understanding about the whole project thing" (003 HIC)

Most students planned to undertake a project proposed by themselves or their UK-based electives supervisor. Not all host supervisors were aware that their student would be conducting a project prior to the start of their elective, and two host supervisors would have liked to have had more involvement in the design of the elective project undertaken. For students who were not able to plan their project in collaboration with their host supervisor, there was often a need to change their plans upon arrival. Although most host supervisors, including all those from a LMIC would prefer a long-term partnership between their department and the UoA, students did not support the idea of the UoA having pre-organised placements for students to select and choose, and preferred to continue the current method of arranging their elective independently.

"I think doing it by yourself gives you like a bit of independence which is...it's a good experience...having to fend for yourself" (003 HIC)

Conducting an elective project during IME

Data collection using different systems within a different setting was a challenge for students.

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

"It took 3 weeks to actually try and get the database to do the work" (001, HIC)

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

Two supervisors from LMIC felt their visiting students required a moderate amount of administrative support for their project. By contrast, host supervisors from high-income countries (HIC) felt their students required very minimal support. Some students encountered a difference in perspective between themselves and their host regarding the project, including sometimes conflict with their host, particularly in LMIC.

"I came up with the idea of a QI...they said 'no because we don't want that to reflect badly on our department...we don't want you accessing patient notes...we don't want you doing an audit...really...suspicious of me, so it made the whole thing quite difficult to get started" (002 LMIC)

"They said to me at the start like 'you are not allowed to publish this'...I had been warned... 'don't make us look bad in your project'" (007 LMIC)

The majority of students did not complete their report within the 8-week elective, and as a result were unable to present or discuss their findings with their host in person. This left some students unsure how their report would be received. One host supervisor from a LMIC specified a preference to receive the results in person.

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

"My tutor said 'make sure you email it to me' so I did, twice, but he's not got back to me so I hope I've not offended them too much" (002 LMIC)

"The Hospital would appreciate if the time frame...will allow [students] to collate and finalize data while on placement and present it to the department for discussion and learning" (007 LMIC)

Value of conducting an elective project

Students were split in their views about having to undertake a project as part of their IME. In addition, some students did not perceive their project work to be of benefit to their host. By contrast, other students saw benefit in undertaking the project. Students who could see that their project was valued by their host, found completing it brought a sense of achievement.

"I can't help but resent having to do it...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)

"I don't personally think my placement got much benefit from what I did. It seemed more of a 'tick-box' exercise" (006 HIC)

"Completing studies [here] is extremely tough... it also feels very important... I set up a template that will be used in a study" (005 LMIC)

All host supervisors found the project that the students undertook was of interest to their department, and most felt it was of use to their department and a positive requirement. One supervisor however felt it detracted from other learning. Students who did not consider the project a useful part of the IME were also those who faced difficulties collaborating with their host supervisor on the project, or who felt unsupported by their supervisors during their IME.

"This is a very positive thing as it helps focus the student. At times when they are not required to undertake any project they tend to be more of tourists and less medical students" (003 HIC)

"I don't feel like my supervisor there would've cared whether I'd done it or not...i got no support with it at all" (003 HIC)

"I think its unrealistic to complete a substantive project in only a few weeks. It becomes a make-work compliance exercise and detracts from the student's ability to learn about different models of medical care" (003 HIC)

Discussion

The experience of planning and conducting a project within student IMEs posed specific challenges. Effective communication between student and host to allow collaborative project planning was valued by all, but was not achieved in the majority of cases. Uncertainties existed in the acquisition of ethical approval for student projects. Data collection within unfamiliar systems provided logistical challenges for students, and a greater administrative burden for LMIC host institutions. Value from the projects undertaken appeared dependent upon mutual benefit and engagement. In addition, differences in healthcare culture towards, particularly audit or quality improvement work, brought conflict between host and student in some LMIC. Although numbers participating within this study were small, the emphasis on the importance of mutuality in research conducted whilst on IME is concordant with the global health literature, and important considerations have been raised including the need for "on-site needs assessment, and flexibility [to] support quality projects."^[10]

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