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# Global health electives: Ethical engagement in building global health capacity

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**ABSTRACT**

**Purpose:** Little is known about the impact medical trainees undertaking global health electives (GHEs) have on host institutions and their communities in low-and middle-income countries. The goal of this study was to explore the relationship dynamics associated with GHEs as perceived by host stakeholders at three sites in sub-Saharan Africa.

**Method:** This case-based interpretive phenomenological study examined stakeholder perspectives in Mwanza, Tanzania, and Mbarara and Rugazi, Uganda, where the University of Calgary, Alberta, Canada has long-standing institutional collaborations. Between September and November 2017, 33 host stakeholders participated in semi-structured interviews and 28 host stakeholders participated in focus group discussions. Participant experiences were analyzed using interpretive phenomenological techniques.

**Results:** The findings revealed that, although GHEs are well-established and a common experience for host stakeholders, their perceptions about who visiting medical trainees (VMTs) are remains indistinct. Participants acknowledged that there are a variety of benefits to GHEs, but overall VMTs appear to benefit the most from this unique learning opportunity. Host stakeholders described significant challenges and burdens of GHEs and recommended ways in which GHEs could be improved.

**Conclusions:** GHEs need to be designed to better embrace ethical engagement and reciprocity with host stakeholders to ensure equity in benefits and responsibilities.

**KEYWORDS**

Global health; medical education; low and middle-income country; qualitative research; international educational exchange

## Introduction

Low- and middle-income country (LMIC) host institutions around the world have received medical students and residents from high-income countries (HIC) for international educational rotations since at least 1968 (Waddell et al. 1976). Global health electives (GHEs) are commonly understood to be where a health care trainee from a highly resourced setting undertakes a clinical care experience in the context of an underserved or resource-constrained population. (University of Calgary 2018) Specific to our study, we have used the term "visiting medical trainee" (VMT) to refer to all medical students and residents from outside the African continent, at any stage in their training who complete a GHE there.

Reported student benefits from GHEs include increased knowledge (e.g. tropical diseases, cross-cultural issues, public health, healthcare delivery), enhanced skills (e.g. problem-solving, clinical examination, laboratory expertise, and language) (Thompson et al. 2003; Abedini et al. 2012; Holmes et al. 2012), career choices that focus on underserved populations and primary care (Godkin and Savageau 2003; Mutchnick et al. 2003; Thompson et al. 2003), and a heightened interest in humanitarianism and public health in subsequent practice.

### Practice points

- Participants listed a variety of benefits that they gain due to visiting medical trainees coming to their site, but many participants also described significant challenges and harms.
- A deficit of social justice within global health electives is particularly evident from the perspectives of low- and middle-income trainees.
- More attention needs to be paid to how visiting medical trainees and low-and middle-income trainees can learn together in a mutually beneficial manner.

Despite these benefits, there has been growing concern about the ethical repercussions of GHEs (Crump and Sugarman 2008; Shah and Wu 2008; Pinto and Upshur 2009; Ackerman 2010), including health risks to visiting medical trainees (VMTs), negative impacts on local patients due to language and cultural barriers (Harris et al. 2003), medical trainees practicing beyond their training (Shah and Wu 2008; Dell et al. 2014), increased time demands on host preceptors, and financial burdens to host institutions (Dell

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et al. 2014). However, many of these studies were based on the perspectives of HIC medical trainees and their institutions (Shah and Wu 2008; Elit et al. 2011). Rarely does data focus on the host country perspectives (Crump et al. 2010; Liu et al. 2015). Of the studies that have explored host stakeholder perceptions of global health electives, we found that most only included host preceptor perspectives (Bozinoff et al. 2014; DeCamp et al. 2014; Kumwenda et al. 2015; Kung et al. 2016; Lukolyo et al. 2016).

Ethical guidelines for global health programs were drafted in 2010 by a *Working Group on Ethics Guidelines for Global Health Training* (WEIGHT) (Crump et al. 2010), one of which called for a more formal assessment of the benefits and harms to institutions, staff, trainees, and communities in host countries. It was also suggested that medical institutions should focus on broad principles of social accountability within global health elective programs through developing bilateral community partnerships (Global Consensus for Social Accountability of Medical Schools 2010).

This qualitative study explored host stakeholder perspectives at University of Calgary (Canada) partner institutions in Tanzania and Uganda. Our primary goal was to provide insights that we could apply to the University of Calgary global health elective program and to enhance our partnerships with host institutions in Mwanza, Tanzania, and Mbarara, Uganda. However, we were also interested in exploring broader principles and issues in GHE ethics. We anticipated that participants would not be able to distinguish between University of Calgary trainees and VMTs from other HIC institutions, and therefore we sought participant perspectives on their experiences with VMTs from any HIC institution. Our findings are, therefore, more broadly applicable to VMTs and can guide other HIC and LMIC institutions in designing global health electives. To that end, our research question sought to explore and explain the relationship dynamics as perceived by stakeholders at three sites in Tanzania and Uganda regarding VMT global health electives.

## Methods

We designed this study as an interpretive phenomenological case study (Yin 2009) to explore how host stakeholders at the selected sites in Uganda and Tanzania perceived relationship dynamics within global health electives, in regard to harms, benefits, and equity. We chose this combination of methodologies because we sought to gain a holistic, in-depth understanding of participant interpretations of their experiences regarding VMT global health electives specifically at three host sites. Therefore, the context of this study is essential in the interpretation of stakeholder perspectives, as well as the transferability of study findings. Interpretive phenomenology allows us to explore in detail participants' personal lived experience and how participants make sense of that particular experience. It is concerned with the individual's perception or account of the event or object, rather than an attempt to produce an objective statement about the object or event itself (Smith and Osborn 2003; Smith 2004). The implications of combining case study methodology and interpretive phenomenology allowed assessment of data convergence and divergence across different stakeholder roles, forms of evidence, and contexts, which increased the robustness of our study (Denzin and Lincoln 1994; Speziale and Carpenter 2007).

The study was conducted in the context of three sites where University of Calgary (U of C) medical trainees regularly undertake GHEs: The Catholic University of Health and Allied Sciences (CUHAS) and The Bugando Medical Center in Mwanza in Tanzania; the Mbarara University of Science and Technology (MUST) and the Mbarara Regional Referral Hospital in Mbarara in Uganda; and Rugazi Health Centre IV in Rubirizi District in Uganda (affiliated with Mbarara University of Science and Technology). Data was collected from interviews and focus group discussions (FGDs) with stakeholders. We conducted semi-structured interviews with health facility administrators, physicians, nurses, clinical officers, medical officers and community liaison members at all three host sites. FGDs were used to gather data from LMIC medical trainees (residents, interns, and medical students) and patients (inclusion of one patient's family member) at all three host sites.

Interview guides for both the semi-structured interviews and FGDs, tailored to each specific stakeholder group, were developed by the research team and adapted based on feedback from the local research collaborators. All of the interview guides used are presented in Supplementary Appendix 1. An experienced translator, translated the interview guides to the local languages, Swahili and Runyankole, and they were checked for contextual meaning prior to data collection.

Interviews and FGDs were conducted between September and November 2017. Local research collaborators assisted in participant recruitment via personal or phone invitation or word-of-mouth. To minimize courtesy bias, the first author (A. D.) was not present in any of the interviews or FGDs except in two semi-structured interviews; however, she was on-site while data were being collected. A local interview moderator conducted the interviews and FGDs. Observations were documented by another local research assistant during the FGDs.

In Tanzania, all but two of the interviews and all of the FGDs were conducted in Swahili by the interview moderator. The first author (AD) conducted two interviews with physicians who spoke fluent English. In Uganda, the interview moderator conducted all of the interviews and focus group discussions in English, except for one interview and one FGD which were conducted in the local language, Runyankole. All of the semi-structured interviews and FGDs were audio recorded, transcribed, and then translated where necessary. The interview moderator and local research collaborator in Tanzania checked the Swahili to English translated transcripts. Written informed consent was obtained from all participants. See Table 1 for details of the interviews and focus groups conducted at each site.

Once transcribed and translated, the 38 interview and focus group transcripts were analyzed using interpretive phenomenological analysis (IPA) techniques (Smith and Osborn 2003). This involved familiarization with the data, complete coding focusing first on one data item, developing emergent themes, connections, and superordinate themes within that specific data item and then repeating these steps for all the other data items with final

Table 1. Number of interviews and focus groups conducted at each host site.

| | Mwanza, Tanzania | Mbarara, Uganda | Rugazi, Uganda | Total |
|---|---|---|---|---|
| Semi-structured interviews | 15 interviews, 16 participants, mean duration 47 min | 11 interviews, 11 participants, mean duration 32 min | 5 interviews, 5 participants, mean duration 46 min | 32 interviews, 33 participants |
| Focus groups | 2 focus groups, mean duration 68 min | 3 focus groups, mean duration 77 min | 1 focus group, mean duration 47 min | 6 focus groups, 28 participants |

Table 2. Demographics of host stakeholders participating in semi-structured interviews and focus groups.

| | Mwanza, Tanzania | | Mbarara, Uganda | | Rugazi, Uganda | | |
|---|---|---|---|---|---|---|---|
| Role | Female (*n*) | Male (*n*) | Female (*n*) | Male (*n*) | Female (*n*) | Male (*n*) | Total |
| Semi-structured interviews | | | | | | | |
| Health facility administrators | 0 | 2 | 1 | 2 | 1 | 0 | 6 |
| Physicians | 2 | 2 | 0 | 4 | 0 | 0 | 8 |
| Nurses | 4 | 2 | 3 | 0 | 1 | 0 | 10 |
| Community liaison members | 1 | 1 | 0 | 1 | 0 | 1 | 4 |
| Medical officers | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| Clinical officers (non-M.D.'s) | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Total of interviews | 8 | 9 | 4 | 7 | 2 | 3 | 33 |
| Focus groups | | | | | | | |
| Medical students | 0 | 2 | 0 | 4 | 0 | 0 | 6 |
| Interns | 1 | 0 | 0 | 4 | 0 | 0 | 5 |
| Residents | 2 | 0 | 1 | 5 | 0 | 0 | 8 |
| Patients | 0 | 2 | 0 | 0 | 6 | 0 | 8 |
| Family member | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total of focus groups | 4 | 4 | 1 | 13 | 6 | 0 | 28 |

identification of themes and superordinate themes across the entire dataset. The purpose of coding in IPA is to understand the participant's meaning and their experiences to thereby enable interpretation (Braun and Clarke 2013).

NVivo Version 11.4.0.1062 (QSR International Pty Ltd, Melbourne, Vic, Australia) was used to code and iteratively identify emerging themes around host stakeholders' experiences of global health electives. Three members of the research team (GH, DB, JH) undertook an independent line-by-line coding of 12 or 13 interviews and/or focus groups each. One other member of the research team (RE) coded all of the transcripts. Emerging themes were discussed with the entire research team including the research collaborators in Uganda and Tanzania.

IRB approval for the study was granted by the University of Calgary Conjoint Health Research Ethics Board (CHREB) (REB 17-0483), the ethics review boards at MUST (No. 15/07-17), CUHAS (CREC/222/2017) and the Uganda National Council of Science and Technology (SS229ES).

## Results

There were 33 participants in 32 semi-structured interviews (one semi-structured interview was a 2-person interview) and 28 participants in 6 focus groups – see Table 2 for details.

Our analyses of the transcripts coalesced around three superordinate themes: global health electives (GHEs) as a common, yet indistinct phenomenon; challenges and burdens of GHEs; and participant recommendations. Although these themes were common to all host stakeholder narratives, we found important nuances within each superordinate theme, emergent theme, and sub-theme.

### *Global health electives as a common, yet indistinct phenomenon*

Although GHEs were a commonly experienced and accepted phenomenon for host stakeholders, who VMTs were, why they were there, how they were assigned to supervisors, and what they were supposed to do lacked clarity.

The majority of participants described frequent encounters with VMTs from a multitude of countries over many years. However, despite defining what we meant by VMTs at the start of each interview and FGD, many participants did not easily distinguish who these visitors were, as they saw all visitors as "whites" or "foreigners." Participant perspectives therefore applied to participants' experiences with pre-medical students, research students from undergraduate to Ph.D., specialist medical doctors, and nursing trainees, as well as VMTs. Even those who were aware of the role of VMTs still described their experiences with other foreign visitors.

Participants described different beliefs as to why VMTs had come for a GHE: to gain knowledge about tropical diseases and to learn about challenges in a resource-limited environment; to interact with patients; and to become "international doctors." A recurring assumption by participants was that VMTs were not allowed to "touch patients" in their home countries but could do so in a GHE. One physician observed:

> … they come in with a need of a different experience where they are free, most of them in their countries are not free to touch patients, so here they can actually touch patients.

As to why their institution had allowed VMTs to visit, some believed it would help VMTs achieve their personal learning goals, while others saw it as desirable to portray themselves as a welcoming culture. Some felt a moral obligation to teach all trainees, while others were concerned at not being able to negotiate how many VMTs they were given to supervise. One physician stated:

> They just bring them [VMTs] and put them and say these ones need supervision, or they show up here […] so, basically, they get offloaded onto you and they are there and you have to deal with them …

In terms of how they had benefitted from GHEs, some participants perceived great benefit from GHEs, while

others felt there was little or no benefit to them. Benefits included mutual knowledge-sharing, securing physical and financial resources, increased reputation of host institutions, enhanced service provision to the host community, and the benefits of institutional collaborations. A recurring observation was that VMTs modeled a good bedside manner and work ethic. One nurse explained:

> The patients, how they take care of them, it is wonderful [ … ] they don't rush [ … ] I think we need to learn that one.

Although the majority of LMIC medical trainees acknowledged that they had benefited from exchanging knowledge with VMTs, they were also quite critical in general as to how much they had personally benefited from their interactions with VMTs. A common concern was that the relationship was rather one sided with VMTs benefiting a lot more than they did. One Tanzanian trainee observed:

> Maybe what I can get from you [VMT] is 'congratulations, you are doing very well, you are living in hard environment' [ … ] maybe they encourage me to keep on working but I cannot say that I benefit … even the knowledge he brings comes from a high technology as compared to mine.

A Ugandan resident echoed this perspective:

> [ … ] you know, I'm a third-year resident [laughter] I should be giving you a lecture on how we do this repair here, not you giving me a lecture how we do the repair here.

None of the trainees gave specific examples of knowledge that they gained from VMTs which they had found useful. Indeed, although participants provided an overall positive summary of GHEs, the benefits and positive impressions appeared to be the silver lining as many challenges and burdens emerged.

### *Challenges and burdens of global health electives*

Many participants described poor behaviors and attitudes of VMTs they had encountered. These included: arrogant and careless attitudes, cultural incompetency, poor emotional self-regulation, and a sense that VMTs were there as medical tourists. For instance, a nurse described:

> When giving them some instructions there are some [visiting medical trainees] who understand and follow, but most of them have a certain attitude of feeling that 'this person can't help me', I don't know because I am an African and they are whites …

Many participants (although notably not patients) described VMTs' emotional displays of culture shock or inadequate emotional self-regulation (Sheppes et al. 2011). A physician observed:

> You do get that one or two percent of students who are just simply not adaptable, so they will not … they have rigid expectations of how things will go and when things don't go that way they get very angry … [and] speak harshly to … Tanzanian colleagues …

Some participants saw VMTs as medical tourists who were more interested in their own learning than being helpful. One physician explained:

> I have had situations where students are in obstetrics and then they come and say 'oh, there is also pediatrics I also want to spend some two weeks in pediatrics' [ … ] so it tends to end up being a medical tour [ … ]and I think it's a problem to have tourists …

Some participants were concerned that VMTs limited their clinical time to spend extra time sightseeing. A Ugandan resident noted:

> I can guarantee you with 100% certainty that whoever student comes to this place, behind their objectives, is to go and visit the Queen Elizabeth National Park. Every one of them will [ … ] and the only time we shall talk about anything other than clinical or academic is maybe if you're asking them whether they went and what they saw … it gets boring.

A prominent theme across almost all stakeholder interviews and medical trainee FGDs was that many VMTs had come without clear learning objectives, which had made it very difficult to supervise them and to assess whether they were achieving their learning objectives.

Some participants indicated that VMTs reduced local trainees' learning opportunities. As one Ugandan resident observed:

> Actually, to me what I have realized is that when the, these trainees are around, our local people tend to give much attention to those foreign trainees and ignore our local students.

Some VMTs were described as inhibiting local trainees' confidence. As a Ugandan intern explained:

> … our medical students tend to be timid. They tend to assume that they don't know and these foreign students know [ … ] so it will one way or the other affect the learning process.

Given the significant challenges and burdens described, GHEs were viewed as an asymmetrical relationship by many participants with VMTs benefiting more than host stakeholders. As one nurse pointed out:

> … the only challenge is they come here, we train them and they go away, they take away the experience and they don't apply it … [to the local context]

A physician emphasized:

> I think the relationship has to be reciprocal … it's not ethical if it's not reciprocal … .

When research was conducted by VMTs it was also seen as skewed in terms of unilateral ethics approval and authorship, and less research applicability to the LMIC context. Ugandan residents explained that VMTs coming for research appeared to receive ethics board approval more quickly than local trainees:

> An indigenous student here would take months, and so people have been asking themselves what's the difference? Is it the money, is it the color, what's the difference? [ … ] It is a harm that is cropping up that people are beginning to question very many things.

Participants observed that patients often perceived VMTs more positively than local health care staff, although participants did not view this as a problem. This recurring theme was called 'the muzungu effect' by one physician:

> … the patients get excited especially if ah the muzungu effect … here 'eh the muzungu has touched me' and they get excited … some cannot distinguish between a muzungu who is qualified and a muzungu who is a visiting student … .

An administrator echoed this

> … blacks believe that all international people especially people who are not black are elite and maybe they're professors and all that. So actually, when they're here [smiles] these patients want to be seen by them.

And from a patient's perspective:

> They [VMTs] are very careful with what they are doing because after work they tell you straight out that: you have this disease, unlike our fellows when they tell you once, if you keep on asking for the second time, they react negatively/they become rude.

### *Participant recommendations*

All participants were asked to reflect on how they would like GHEs to be improved. Many participants emphasized the need for bilateral exchange opportunities for LMIC host stakeholders. For example, one administrator stated

> We have always said if there is an opportunity for our students to go like that's the main thing. It feels bad having your own students not have any exposure at all.

Improved communication was another recurring theme in all but the patient FGD. It was recommended that communication between the sending institution and host institution be improved before, during, and after a GHE occurs. It was also noted that communication needed to be improved within their own host institution, particularly between the various departments. The Ugandan host site had recently established an International Relations Office (IRO), which was seen as having improved the coordination of GHEs.

Pre-arrival recommendations related to transparency in the selection of VMTs, better pre-departure training for VMTs, and better preparation of host stakeholders. It was also noted that VMTs coming within an institutional collaboration were generally better prepared than those who had come independently.

Recommendations to improve GHEs on-site included the need for local orientation, explicit VMT learning objectives, improved coordination of VMT supervision, and increased duration of GHEs. There was ambiguity as to whether accompanying preceptors from the sending institution were a good idea. Although some participants viewed accompanying preceptors as having a positive effect, others viewed them negatively. One physician explained,

> … to me the thing […] is that you need to have faculty … ideally you need to have faculty on the ground with the visiting students … and the goal of that is to prevent the students from detracting too much from local faculty …

Another physician stated

> … they should have the trust that the University they're sending their students to, will actually have their best interests at heart. Yeah, so foreign preceptors can come but I don't, I wouldn't promote that so much.

LMIC trainees made some strong recommendations that included synchronization of VMTs' schedules with that of LMIC trainees, pairing VMTs with LMIC trainees, and VMTs being treated and evaluated equally as LMIC trainees.

In terms of what should occur when VMTs return to their home country, recommendations included: better feedback from VMTs and sending institutions to the host preceptors and host institution, and VMTs need to pay more attention to how their GHE experience can lead to long-term benefit for host institutions as well as their trainees.

An administrator explained how to provide long-term benefit:

> … they should not come once and go back forever, my expectation is they come to [city], they establish networks with our students and even staff and then something grows out of that collaboration, so they come as medical students, they go back, they finish their studies but eventually they come back either as researchers or as teachers and collaborators […] if that happens that will be a very, very big success and one which is sustainable.

Although there were many different recommendations by participants to improve the process of GHEs, participants generally wanted GHEs to continue. They acknowledged, however, the need to improve the process through better communication and purposeful collaboration.

The host stakeholders who participated in semi-structured interviews and FGDs provided individual perspectives openly and reflectively as they discussed the complexity of the phenomenon of GHEs. All participants were familiar with GHEs as a commonly experienced, yet indistinct, phenomenon as they often contend with many foreign visitors who come in different roles. Participants listed a variety of benefits that they gain due to VMTs coming to their site, but many participants also described significant challenges and harms. All of the challenges reported support a strong theme that GHEs are a one-sided relationship and host stakeholders minimally benefit. Despite the multitude of challenges and harms, host stakeholders would like GHEs to continue, with the hope that their recommendations will be implemented to promote mutually beneficial and reciprocal GHEs.

## Discussion

Although previous studies have attempted to understand impact of GHEs on the host institutions and communities, (Bozinoff et al. 2014; Kumwenda et al. 2015; Kung et al. 2016; Lukolyo et al. 2016) there are gaps in understanding LMIC host perspectives on VMTs and their GHEs. Our comprehensive review of the literature suggested that this is one of the first studies that sought to gain a broad range of host stakeholder perspectives on the local impact of GHEs.

Although we found differences between host sites, we identified recurring issues and concerns across all host sites. Many of the benefits of GHEs identified by our host stakeholders have been described in the literature. (Bozinoff et al. 2014; Kumwenda et al. 2015; Kung et al. 2016; Lukolyo et al. 2016; Evans et al. 2017). However, in our study, participants generally felt that they had gained relatively little benefit from VMTs compared to the VMTs themselves, and they wanted to see more attention paid to ensuring mutual benefits and improved opportunities for exchange visits with HICs. For example, while some participants felt there was great benefit to them because of physical and financial resources received, others felt that these resources were not fairly distributed and did not necessarily benefit those who had shouldered the burden of supervising the VMTs. Transparency and equity in the distribution of these resources should be carefully considered within GHE experiences.

More specifically, our findings suggest that although LMIC medical trainees experienced some personal benefits in interacting with VMTs, the benefits to them were minimal.

This may clarify the findings of Elobu et al. (2014) who found that 12 out of 32 Ugandan trainees, did not perceive that visiting trainees improved their training experience.

The perception by participants that VMTs go on GHEs to "touch patients" because they cannot do so in their own countries, has not been previously discussed in the literature (Shah and Wu 2008; Elit et al. 2011; Sullivan 2018). Moreover, this was not the intention or expectation of the trainees undertaking GHEs or their parent institutions. Although our participants did not relay concern that VMTs were practicing on patients beyond their capabilities, sending institutions should be aware of this perception.

A significant ethical concern we identified was "the muzungu effect," something that has been relatively little-explained in the literature. Bozinoff et al. (2014) questioned whether patients perceived care offered by foreigners to be superior to that delivered by local staff and they felt this concern merited further understanding. Our study is also one of the first reports to include patient perspectives on VMTs (DeCamp et al. 2014). A study by DeCamp et al. (2014) included patient perspectives on trainee involvement (both medical and non-medical trainees) in medical missions; patients described trainee involvement as beneficial to the trainee and to the patients themselves, and they did not report any negative effects of trainee involvement. We found that patients perceived VMTs more positively than local healthcare providers as described by both patient and physician participants. Although this phenomenon was not a concern from the host perspective, institutions sending students on GHEs should reflect on the potential ethical implications of this issue.

We identified several areas for improvement that have not been previously well-described in the literature. These included the need for central host organization, such as an international relations office (IRO), communication between sending and host institutions, as well as within the host institutions' departments through all the phases of the GHE, and ensuring that there are long-term benefits to the host institution from hosting VMTs.

We were surprised to find that having a foreign preceptor present at the host site was seen rather equivocally. Although there have been suggestions that foreign preceptors accompany their VMTs (Simonelis et al. 2011; Kumwenda et al. 2015; Hayward and Li 2017), the impact of a foreign preceptor accompanying trainees has not been well evaluated.

In the context of host recommendations for improvement, we situate our findings within the broader discussion around equity and social justice. Fraser has defined justice as "parity of participation":

> Justice requires social arrangements that permit all to participate as peers in social life. Overcoming injustice means dismantling institutionalized obstacles that prevent some people from participating on a par with others as full partners (Fraser and Olson 2008)

A deficit of social justice within GHEs was particularly evident from the perspectives of LMIC trainees. Although VMTs were perceived to come to LMIC to "touch patients," LMIC trainees perceived that they were not provided the same opportunities. This challenge was acknowledged in Pitt et al.'s (2016) description of a bilateral exchange program as their HIC institutional regulations prevent LMIC trainees from hands-on engagement. A social justice perspective suggests that HIC institutions should provide similar opportunities for host LMIC trainees to visit the HIC sending institution as LMIC host institutions do for HIC trainees to visit LMICs. In doing so, they will need to address systematic barriers such as cost and liability.

A key implication of this study then is that more attention needs to be paid to how VMTs and LMIC trainees can learn together in a mutually beneficial manner. Moreover, given the criticisms that VMTs' knowledge was not applicable in LMIC contexts because of the LMIC host institution's relatively limited access to medical technologies, VMTs need to be better prepared regarding what can be translated from HIC to LMIC contexts. Third, given that the presence of VMTs was seen as inhibiting local trainees' learning opportunities, clear guidelines need to be established to ensure that VMTs are not given automatic priority by host staff. Fourthly, there should be more opportunities for reciprocal visits built in to GHEs; exchanges rather than one-way experiences for VMTs visiting LMICs. Finally, there needs to be better understanding between VMTs and LMIC host stakeholders regarding the extent to which VMTs should engage with patients in the host institution and to what extent LMIC medical trainees would have equal opportunity to engage with patients if they participated in a HIC elective.

We note a number of study limitations. First, our study employed case study methodology to focus on three GHE host sites, all of which were in sub-Saharan Africa. While this was proportionate to the methodology we used, our findings could be strengthened by considering experiences from other GHE host sites in other parts of the world and with other kinds of GHE relationships. Second, we were concerned with potential courtesy bias; we took steps to mitigate this by using a local research assistant to conduct the semi-structured interviews and FGDs. The transcripts were checked for courtesy bias by the research team and found that participants seemed willing to provide critique. A third limitation relates to language barrier and interpretation as translation of the Swahili and Runyankole transcripts may have led to some loss of nuance and meaning which was mitigated through discussion of the translation with the research assistant and the local research collaborator. Fourthly, as this was a qualitative study we did not quantify details such as the percentage of VMTs who are residents or how many hours host preceptors spend teaching visiting medical trainees, as explaining the complexity and variability of this is better suited to a separate study. All study sites had a variety of administrative arrangements which, although we were able to ascertain that this contributes to the indistinctiveness of the global health elective phenomenon, we did not examine the specific details of each arrangement.

Although our study adds new perspectives to the field regarding GHEs from a breadth of host stakeholder experiences, the imbalance of host versus visitor perspectives included in primary studies on GHEs should continue to motivate further exploration and understanding of host stakeholder perspectives.

## Conclusion

This is the first study to our knowledge to provide holistic, in-depth insights regarding the perspectives of host stakeholders on global health electives. We note a number of significant challenges and issues that are inadequately or

not at all described in previous studies, along with recommendations as to how they might be addressed. The perspectives shared in this study will hopefully be the impetus for HIC and LMIC institutions to work together, seeking ethical engagement and reciprocity within structured collaborations and bidirectional focus.

## Ethical approval

University of Calgary Conjoint Health Research Ethics Board (CHREB) (REB 17-0483), the ethics review boards at MUST (No. 15/07-17), CUHAS (CREC/222/2017), and the Uganda National Council of Science and Technology (SS229ES).

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**Glossary**

**Emotional Self-Regulation:** "Emotional self-regulation refers to the complex process of initiating, inhibiting, and modulating the conscious aspects of emotion to effectively achieve one's goals. Although this concept, at the most basic level, refers to controlling one's feelings, theory and research on emotional self-regulation have addressed various cognitions, physiological processes, and behavioral outcomes associated with individual differences in the capacity to effectively manage one's emotions."

Sonnentag TL, Barnett MA. 2011. Emotional Self-Regulation. In: Goldstein S, Naglieri JA (eds) Encyclopedia of Child Behavior and Development. Springer, Boston, MA.

**Global Health Elective:** Within the field of medical education, this is commonly understood to be a clinical care or health research experience by a health care trainee from a highly-resourced setting within an underserved or resource-constrained population.

University of Calgary. 2008. Global Health Electives. Retrieved from http://www.ucalgary.ca/ghealth/education/electives.

Crump JA, Sugarman J. 2008. Ethical considerations for short-term experiences by trainees in global health. JAMA. 300. doi:10.1001/jama.300.12.1456.

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## References

Abedini NC, Gruppen LD, Kolars JC, Kumagai AK. 2012. Understanding the effects of short-term international service-learning trips on medical students [Evaluation Studies]. Acad Med. 87(6):820–828.

Ackerman LK. 2010. The ethics of short-term international health electives in developing countries [journal article]. Ann Behav Sci Med Educ. 16(2):40–43.

Bozinoff N, Dorman KP, Kerr D, Roebbelen E, Rogers E, Hunter A, O'Shea T, Kraeker C. 2014. Toward reciprocity: host supervisor perspectives on international medical electives [Research Support, Non-U.S. Gov't]. Med Educ. 48(4):397–404.

Braun V, Clarke V. 2013. Stages of coding and analysis described by different qualitative analytic methods. In: Carmichael M, editor. Successful qualitative research: a practical guide for beginners. London: Sage.

Crump JA, Sugarman J. 2008. Ethical considerations for short-term experiences by trainees in global health. JAMA. 300(12):1456.

Crump JA, Sugarman J, the Working Group on Ethics Guidelines for Global Health Training. 2010. Ethics and best practice guidelines for training experiences in global health. Am J Trop Med Hyg. 83(6): 1178–1182.

DeCamp M, Enumah S, O'Neill D, Sugarman J. 2014. Perceptions of a short-term medical programme in the Dominican Republic: voices of care recipients. Glob Public Health. 9(4):411–425.

Dell EM, Varpio L, Petrosoniak A, Gajaria A, McCarthy AE. 2014. The ethics and safety of medical student global health electives. Int J Med Educ. 5:63–72.

Denzin NK, Lincoln YS. 1994. Handbook of qualitative research. Thousand Oaks (CA): Sage.

Elit L, Hunt M, Redwood-Campbell L, Ranford J, Adelson N, Schwartz L. 2011. Ethical issues encountered by medical students during international health electives. Med Educ. 45:704–711.

Elobu AE, Kintu A, Galukande M, Kaggwa S, Mijjumbi C, Tindimwebwa J, Roche A, Dubowitz G, Ozgediz D, Lipnick M. 2014. Evaluating international global health collaborations: perspectives from surgery and anesthesia trainees in Uganda. Surgery. 155(4):585–592.

Evans T, Akporuno O, Owens KM, Lickers B, Marlinga J, Lin HC, Loh LC. 2017. Using Maslow's Hierarchy to highlight power imbalances between visiting health professional student volunteers and the host community: an applied qualitative study. Educ Health. 30(2): 133–139.

Fraser N, Olson K. 2008. Adding insult to injury: Nancy Fraser debates her critics. London, New York: Verso.

Global Consensus for Social Accountability of Medical Schools. 2010. San Francisco. Global Health Education Consortium. http://healthsocialaccountability.sites.olt.ubc.ca/files/2011/06/11-06-07-GCSA-English-pdf-style.pdf

Godkin M, Savageau J. 2003. The effect of medical students' international experiences on attitudes toward serving underserved multicultural populations. Fam Med. 35:273–278.

Harris JJ, Shao J, Sugarman J. 2003. Disclosure of cancer diagnosis and prognosis in Northern Tanzania. Soc Sci Med. 56(5):905–913.

Hayward LM, Li L. 2017. Sustaining and improving an international service-learning partnership: evaluation of an evidence-based service delivery model. Physiother Theory Pract. 33(6):475–489.

Holmes D, Zayas L, Koyfman A. 2012. Student objectives and learning experiences in a global health elective. J Community Health. 37(5): 927–934.

Kumwenda B, Dowell J, Daniels K, Merrylees N. 2015. Medical electives in sub-Saharan Africa: a host perspective. Med Educ. 49(6):623–633.

Kung TH, Richardson ET, Mabud TS, Heaney CA, Jones E, Evert J. 2016. Host community perspectives on trainees participating in short-term experiences in global health. Med Educ. 50(11):1122–1130.

Liu Y, Zhang Y, Liu Z, Wang J. 2015. Gaps in studies of global health education: an empirical literature review. Glob Health Action. 8(1): 25709.

Lukolyo H, Rees CA, Keating EM, Swamy P, Schutze GE, Marton S, Turner TL. 2016. Perceptions and expectations of host country preceptors of short-term learners at four clinical sites in Sub-Saharan Africa. Acad Pediatr. 16(4):387–393.

Mutchnick IS, Moyer CA, Stern DT. 2003. Expanding the boundaries of medical education: evidence for cross-cultural exchanges [Review]. Acad Med. 78(Supplement):S1–S5.

Pinto AD, Upshur R. 2009. Global health ethics for students. Dev World Bioethics. 9(1):1–10.

Pitt MB, Gladding SP, Majinge CR, Butteris SM. 2016. Making global health rotations a two-way street: a model for hosting international residents. Glob Pediatr Health. 3:2333794X1663067.

Shah S, Wu T. 2008. The medical student global health experience: professionalism and ethical implications. J Med Ethics. 34(5):375–378.

Sheppes G, Scheibe S, Suri G, Gross JJ. 2011. Emotion-regulation choice. Psychol Sci. 22(11):1391–1396.

Simonelis J, Njelesani J, Novak L, Kuzma C, Cameron D. 2011. International fieldwork placements and occupational therapy: lived experiences of the major stakeholders. Aust Occup Ther J. 58(5): 370–377.

Smith JA. 2004. Reflecting on the development of interpretative phenomenological analysis and its contribution to qualitative research in psychology [Article]. Qual Res Psychol. 1(1):39–54.

Smith JA, Osborn O. 2003. Interpretive phenomenological analysis. In: Smith JA, editor. Qualitative psychology: a practical guide to research methods. 2nd ed. London: Sage.

Speziale HJ, Carpenter DR. 2007. Qualitative research in nursing: advancing the humanistic imperative. 4th ed. Philadelphia: Lippincott Williams & Wilkins.

Sullivan N. 2018. International clinical volunteering in Tanzania: a post-colonial analysis of a Global Health business. Glob Public Health. 13(3):310–324.

Thompson MJ, Huntington MK, Hunt DD, Pinsky LE, Brodie JJ. 2003. Educational effects of international health electives on U.S. and Canadian medical students and residents: a literature review. Acad Med. 78(3):342–347.

University of Calgary. 2018. Global health electives. http://www.ucalgary.ca/ghealth/education/electives.

Waddell WH, Kelley PR, Suter E, Levit EJ. 1976. Effectiveness of an international health elective as measured by NBME part II. J Med Educ. 51(6):468–472.

Yin R. 2009. Case study research: design and methods. Thousand Oaks (CA): Sage.