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How are Canadian universities training and supporting undergraduate medical, physiotherapy and occupational students for global health experiences in international low-resource settings?

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## **ABSTRACT**

**OBJECTIVES:** Canadian medical (MD), physiotherapy (PT) and occupational therapy (OT) students increasingly show an interest in global health experiences (GHEs). As certain moral hazards can occur as a result of student GHEs, a growing consensus exists that universities must have an established selection process, in-depth pre-departure training (PDT), adequate onsite supervision and formal debriefing for their students. This study aimed at identifying current practices in Canadian MD, PT and OT programs and discussing areas for improvement by comparing them with recommendations found in the literature.

**METHODS:** Canadian MD, PT and OT programs (n = 45) were invited to answer an online survey about their current practices for GHE support and training. The survey included 24 close-ended questions and 18 open-ended questions. Descriptive statistics and a thematic analysis were performed on the data and results were discussed with recommendations found in the literature.

**RESULTS:** Twenty-three programs responded to the survey. Student selection processes varied across universities; examples included using academic performance, interviews and motivation letters. All but 1 MD program had mandatory PDT; content and teaching formats varied, as did training duration (2-38 hours). All but 1 MD program had onsite supervision; local clinicians were frequently involved. Debriefing, although not systematic, covered similar content; debriefing was variable in duration (1-8 hours).

**CONCLUSIONS:** Many current practices are encouraging but areas for improvement exist. Integrating global health content into the regular curriculum with advanced study option in global health for students participating in GHEs could help universities standardize support and training.

**Keywords:** global health, medicine, physiotherapy, occupational therapy, student

## **RÉSUMÉ**

**OBJECTIFS :** Un intérêt croissant est observé parmi les étudiants canadiens de médecine (MD), physiothérapie (PHT) et ergothérapie (ERG) pour les expériences en santé mondiale. Face aux enjeux moraux en lien avec ceux-ci, il est reconnu que les universités doivent se doter de processus de sélection, d'une formation prédépart (FPD) et d'un débriefage au retour, de même qu'assurer une supervision sur le terrain. Cette étude visait à identifier les pratiques actuelles dans les programmes canadiens de MD, PHT, ERG et de les comparer avec des recommandations retrouvées dans la littérature.

**MÉTHODES :** Un sondage en ligne a été envoyé à tous les départements de MD, PHT et ERG (n = 45). Le sondage contenait 24 questions fermées et 18 questions ouvertes. Une analyse thématique ainsi que des statistiques descriptives ont été utilisées sur les données recensées, et les résultats ont été comparés avec des recommandations identifiées dans la littérature.

**RÉSULTATS :** Au total, 23 programmes ont répondu au sondage. Le processus de sélection varie d'une université à l'autre ; quelques exemples incluent l'utilisation des résultats académiques et d'entrevues de sélection. Tous les programmes sauf 1 en MD offrent une FPD ; les thèmes couverts, les méthodes d'enseignement, ainsi que la durée (2-38 heures) varient. Tous les programmes sauf 1 en MD assurent une supervision sur le terrain. Le débriefage n'est pas systématique, mais est similaire chez ceux qui l'offrent ; la durée de celui-ci est variable (1-8 heures).

**CONCLUSIONS :** Si plusieurs des pratiques actuelles sont encourageantes, certaines pourraient être améliorées. Intégrer de la formation en santé mondiale dans le curriculum et avoir des cours d'option avancés en santé mondiale permettraient aux universités de mieux standardiser leurs pratiques.

**Mots clés :** santé mondiale, médecine, physiothérapie, ergothérapie, étudiant

## INTRODUCTION

Global health (GH) is an increasingly popular topic in health in general, and also in public health.<sup>1-5</sup> GH and public health share similarities:<sup>5,6</sup> both view health in terms of physical, mental, and social well-being, rather than merely the absence of disease, and both address the root causes of ill health through a broad array of scientific, social, cultural, and economic strategies.<sup>7</sup> However, GH is more specific where health issues, determinants, and solutions have to be explored within a transnational lens.<sup>5,6,8</sup> GH is commonly defined as an area for study, research, and practice that places a priority on improving health and achieving health equity for all people worldwide.<sup>6,9</sup> Students increasingly show an interest in global health experiences (GHEs), defined as placements in international low-resource (ILR) settings.<sup>3,5,8,10</sup> In 2009, 43.2% of graduating medical students had participated in a GHE during their studies, an increase of 13.2% since 2007.<sup>8,11</sup> GHEs are known to increase public health awareness, improve clinical and communication skills and deepen one's understanding of the multi-factorial influences on health.<sup>1,12</sup> GHEs are also linked to future practice patterns in public health, multicultural settings and local underserved areas.<sup>1,3,12,13</sup> Along with these positive outcomes, moral hazards exist within GHEs such as students practicing beyond their scope of knowledge,<sup>3,8,10,14,15</sup> the tendency to focus on student learning rather than community needs<sup>12</sup> and the student's lack of contextual understanding.<sup>16</sup> A growing consensus therefore exists that, to maximize positive outcomes and lessen moral hazards, universities have the obligation to support and train students throughout their GHEs.<sup>2,5,8</sup> Many recommendations have been formulated with regards to this process, which can be summarized into establishing a student selection process, training students before they leave, ensuring adequate supervision during the GHE and formally debriefing students upon their return.<sup>3,12,17</sup> If a clear consensus is emerging in the literature about universities' responsibilities, little is known about current practices within Canadian universities. Some examples

are found in the literature<sup>1,8,11,18</sup> but do not provide a comparison across Canadian health programs nor do they discuss them with recent recommendations that have emerged in the literature. This study therefore aimed at investigating the current state of GHE support and training in Canadian undergraduate medical (MD), physiotherapy (PT) and occupational therapy (OT) programs. Moreover, it aimed at discussing areas of strengths and for improvement by comparing current practices with recommended practices found in the literature.

## **METHODOLOGY**

Ethics approval was obtained from our University's Research Ethics Board. An Internet-based, self-administered questionnaire was developed in Fall 2014, based on the results of a scoping review we conducted which identified recommendations for GHE support and training. More concretely, we used our findings to structure the survey in four sections: what universities do to select students, prepare them before their GHE, support them during their GHE, and debrief them upon their return. The survey collected descriptive information on GHE support and training for all Canadian MD, PT and OT programs and questions explored if, and how, the recommended content was covered (see Appendix A for a copy of the questionnaire). We limited our survey to these disciplines as we consider their training shares commonalities and as our University's pre-departure training (PDT) is geared towards MD, PT and OT. We consulted with experienced colleagues from our local MD, PT and OT programs to help interpret the literature and pilot the survey. Changes in content were made to reduce the survey's length, to maximize response rates and focus only on the core aspects of GHE support and training. The final version of the survey included 24 close-ended questions and 18 open-ended questions. We identified PT and OT clinical coordinators as key respondents due to their knowledge about their programs' clinical placements; whereas, for MD, we contacted each

university to identify a qualified key respondent. The initial email invitation, including the consent form and survey link, was sent out in March 2015. Two follow-up invitations were sent out at one-month intervals. The close-ended data was analyzed with SPSS software. Only descriptive analysis (i.e. means and frequencies) is provided due to the small sample sizes. A thematic analysis<sup>19</sup> was performed on short open-ended elements. JB read the responses and assigned a code to each segment. CC reviewed the codes and together, JB and CC identified the emerging themes.

It is important to note that our original survey explored current support and training practices not only for placements in ILR settings, but also for placements in international high-resource settings (IHR) and in indigenous health settings (IH). As much of the literature reviewed was geared towards ILR, we opted to present only these results to allow for a better comparison with the literature. However, as some authors expressed the need for specific content to be covered to prepare students for IH settings, we briefly expand on these specificities in our discussion.

## **RESULTS**

Out of the 45 invitations sent out, 23 surveys were completed (51.1% response rate). Table 1 shows a breakdown of the response rate per discipline as well as their corresponding number of ILR placements.

[Insert Table 1 about here]

Table 2 shows the highlights of the survey per discipline: how many had an established selection process, mandatory PDT, onsite supervision and mandatory debriefing.

[Insert Table 2 about here]

### **Selection process**

As shown in Table 2, selection processes were present for all PT and OT, but only in 63.6% of MD. Various selection processes were described. MD students frequently needed to organize their own GHE and have it approved by their global health office (GHO); one university required students to complete a GH certificate; two others held interviews. PT programs mostly looked at academic records; two universities required students to meet with their clinical coordinator; other requests included submitting reference letters, motivation letters or resumes. OT programs mainly required their students to submit motivation letters or resumes; other requests included submitting academic records, reference letters or case studies; one university required their students to attend a GH symposium.

### **Pre-departure training**

Table 3 presents detailed information on mandatory PDT, offered by all programs except for 1 MD (see Table 2). Programs and GHOs were often responsible for the PDT; its duration varied greatly, as did its content and training formats. Two types of PDT groups were observed: placement-specific groups (i.e. only ILR) or mixed groups for all student placements in ILR, IHR and in IH settings.

[Insert Table 3 about here]



## **Onsite supervision**

Table 4 shows onsite supervision and training. All but 1 MD program had some sort of supervision for their students. Local health professionals were often responsible for student supervision. Onsite training, offered by few universities, included local cultural outings; language study; and group discussions concerning the host country, the placement, clinical cases, the group dynamic, and the overall aim of the project.

[Insert Table 4 about here]

## **Debriefing**

Table 5 presents detailed information about debriefing, which was not systematic in any discipline (see Table 2). However, the content covered in debriefing was standard. GHOs often were responsible for MD debriefing whereas programs played a major role in PT and OT. Training groups were more frequently mixed, involving all students participating in ILR, IHR and IH placements.

[Insert Table 5 about here]

## **DISCUSSION**

This study aimed at identifying how students are selected, prepared for, supervised and debriefed for GHEs. The discussion is organized to compare current practices with recommendations found in the literature to help universities improve and standardize GHE support and training.

## **Student selection**

Developing guidelines for student selection in collaboration with the host institutions can help clarify expectations, increase the likelihood of a positive learning experience and minimize the potential for moral hazards.<sup>12</sup> Selection criteria may include personal attributes and aptitudes such as being adaptable, sensitive to local priorities, motivated to address GH issues and willing to listen and learn.<sup>3,4</sup> Other specific criteria may be identified by the host institutions (e.g. language skills).<sup>3,4</sup> During the selection process, it may be beneficial to educate students about the potential detrimental effects of medical tourism,<sup>2,10</sup> defined as western healthcare workers seizing the opportunity to combine travel with seemingly exotic short-term work opportunities.<sup>20</sup> Doing so may dissuade students from viewing their experience solely as an ideal way to travel, which may frustrate the host institution and make them doubt the seriousness of the students' commitment to learning.<sup>21</sup> This topic could further include the criticism of students using vulnerable people in ILR settings to practice clinical skills and enhance resumes.<sup>22</sup> Our results indicate that universities did not all have a selection process and that their methods varied. Certain universities based themselves solely on academic records, which may identify students with strong clinical skills, but does not explore motivations and personal attributes. Interviews and motivation letters, as seen in some universities, may be an efficient way of selecting students.<sup>17,21,23</sup> In summary, it appears essential that universities have a selection process, ideally established in collaboration with the host institution,<sup>12</sup> exploring personal attributes, professional aptitudes and motivations.<sup>8,9,12,17</sup>

## **Pre-departure training**

Recommended content for PDT includes general GH topics to foster an understanding of social health determinants,<sup>3,17,23,24</sup> placement-specific topics such as a presentation of the host

institution,<sup>3,17,23,24</sup> societal norms and behaviors<sup>3,12,17</sup> and local history, culture and language;<sup>8,12,21,23,24</sup> culture shock;<sup>12</sup> ethics and critical thinking,<sup>5,8,10,15,23</sup> cultural humility and cross-cultural communication.<sup>3,8,17,25-27</sup> The survey showed varying practices across disciplines. Only half of the programs introduced the host institutions, although this information is crucial for students to understand their role.<sup>17</sup> Clarifying roles can also be an opportunity to engage students in discussion about ethics, with regards to their professional limits. In our survey, GH ethics were covered in MD more so than in PT and OT. Covering GH ethics is essential, as students may have inflated ideas about the value of their skills.<sup>2</sup> Furthermore, students may be unaware of the various power differentials existing in GH settings and of their impact: a combination of north-south relations, of the very nature of the professional-patient relationship and of the students' privileged background.<sup>5,28,29,30</sup> Finally, local culture, history and language were hardly addressed in PT and OT, yet a basic understanding of these is essential in developing cultural competency.<sup>3,8,17,28</sup> To align themselves with current recommendations, universities might consider standardizing their PDT content to include general GH and placement-specific knowledge, ethics and critical thinking, cultural humility and cross-cultural communication, as students may not automatically have the knowledge, attitudes or skills necessary to be effective and appropriate in multicultural and low-resource healthcare settings.<sup>5,26</sup>

With regards to training formats, a combination of didactic, reflective and experiential components are recommended in the literature. Simulated patients can be used to hone students' cross-cultural communication skills and case studies may facilitate concept applicability.<sup>25,26,31</sup> To help students integrate new concepts, it may be interesting to combine discipline-specific case studies with ethical debates and require students to adapt their problem-solving skills to include cultural and social

aspects and to explore GH solutions that go beyond the clinical realm. Reflective activities may help students develop an introspective and humble practice and adjust their attitudes, by identifying biases or paternalistic viewpoints within themselves.<sup>25,26,31</sup> Considerable benefits to group work incorporating critical peer feedback is noted,<sup>23</sup> as are discussions with peers having previously participated in a GHE.<sup>1,15</sup> The survey results indicate that programs used a mix of training formats, including workshops, readings and some reflective assignments, all of which allow for active learning.<sup>25</sup> Although it is not possible to predict and prepare for every potential scenario, the aim should be to equip students with tools to be better global citizens and enhance their chance of having a good learning experience.<sup>8</sup>

Optimal duration for PDT is not spoken of widely in the literature. Our results show a wide variability between current practices, from 2 to 38 hours. Despite the best of intentions to cover the recommended PDT content, it seems unlikely that short PDT sessions may allow students to integrate new concepts. Though no specific guidelines exist to define the perfect duration for PDT, Edwards, et al., stated that international electives will only meet the requirements of globalization if they are delivered within a comprehensive program of teaching about international health.<sup>14</sup> Programs must often balance their desire of offering in-depth PDT with its feasibility, due to organizational difficulties (e.g. scheduling conflicts) and the variability GHE locations. Some solutions exist to address this. GH issues could be part of the core curriculum, with advanced study options for students participating in GHEs.<sup>14</sup> Given Canada's cultural diversity and its many low-resource settings, concepts related to critical thinking and humility that emerged in GHE training could be relevant for all students.<sup>28</sup> Moreover, cultural competency and cross-cultural communication training are considered critical core components of professional practice.<sup>25-27,32,33</sup>

As certain programs offer their PDT to mixed groups of students (i.e. ILR, IHR and IH), it seems important to highlight specificities that practicing in IH settings warrants, especially considering the recent publication by the Truth and Reconciliation Commission (TRC) in 2015. Although many GH concepts may apply to IH, it is important to adapt this training to the reality of working in indigenous communities and to understand the history that we share as Canadians, as well as the issues faced by Indigenous communities today. Special care needs to be taken to educate students about cultural safety. A culturally unsafe practice can be understood to mean any actions that diminish, demean or disempower the cultural identity and well-being of an individual.<sup>34</sup> Cultural safety requires the analysis of power imbalances, institutional discrimination, colonization and colonial relationships as they apply to healthcare and requires professionals to embrace the skill of introspection as a means to advancing therapeutic encounters with Indigenous peoples.<sup>35</sup> The TRC calls specifically for training in cultural competency; Indigenous health issues; the history and legacy of residential schools; the United Nations Declaration on the Rights of Indigenous Peoples; Treaties and indigenous rights; and Indigenous teachings and practices.<sup>36</sup> Learning about the history of Canada's dealing with its Indigenous peoples is essential as, for over a century, the central goals of Canada's Indigenous policy were to eliminate Indigenous governments; ignore Indigenous rights; terminate the Treaties; and, through a process of assimilation, cause Indigenous peoples to cease to exist as distinct legal, social, cultural, religious, and racial entities in Canada.<sup>36</sup> This history with its resulting racism, discrimination and marginalization continues to affect the health and well-being of many communities.<sup>35</sup>

## **Onsite supervision**

The literature suggests that supervision should be geared towards the students' level of training.<sup>3,8,12,17</sup> Our survey showed that local health professionals are often responsible for onsite supervision; this allows for a better understanding of the local context and for cultural and linguistic translation,<sup>24</sup> but emphasizes the need to have a shared understanding of students' roles and limitations.<sup>3,17</sup> Establishing specific learning objectives for GHEs in partnership with the host institution may help clarify the level of supervision required.<sup>12</sup>

## **Debriefing**

Structured debriefing is essential for enhancement of the overall GHE.<sup>1,3,17</sup> As there is little evidence that students spontaneously gain critical self-consciousness,<sup>23</sup> debriefing provides an opportunity to engage in reflection, discuss challenges experienced during the GHE, work through unresolved issues and review learning outcomes.<sup>1,12,15</sup> As seen in our survey, although debriefing was not systematic, the content covered seems in line with recommendations. Additionally, reverse culture shock was covered, which surprisingly was not specifically spoken of in the literature. Reverse culture shock, defined as a difficulty in reintegrating one's own culture after a long stay abroad, may leave students feeling marginalized by the change they see in themselves.<sup>37</sup> Universities may therefore want to steer away from expeditious debriefing sessions to allow students to openly discuss their experience and to identify students who may need additional support. Since debriefing varied from 1 to 8 hours in our survey, universities may want to reflect on the ideal duration needed for their debriefing, based on their programs' and students' needs. In any case, it would seem unlikely that 1 hour is sufficient to evaluate the GHE, address learning outcomes and identify students struggling with reverse culture shock.

### **Limitations and future directions**

Not all universities or programs participated in the survey which might limit the generalizability of our results. However, certain trends were observed and allowed to describe current practices. Survey questions can have been interpreted differently from one respondent to the other, even if we piloted the survey before its launch. Likewise, responses to the survey were contingent to participants' knowledge about GHE support and training within their institution. We limited this bias by using a standardized process to identify key respondents and offered participants the possibility to refer us to another key respondent. A strength seen in our survey was its interdisciplinary nature, allowing for comparison across programs; future research would, however, benefit from including other health professions (e.g. nursing). Next steps include the evaluation and comparison of different GHE support and training practices, as the current recommendations found in the literature are based mostly on authors' opinions rather than on a rigorous evaluation of GHE support and training programs.

### **CONCLUSION**

This study allowed us to observe how Canadian MD, PT and OT students are being selected, trained and supported for GHEs. To align themselves with current recommendations, universities could select students based on their personal attributes, professional aptitudes and motivations. PDT could be enhanced by using a combination of training formats to enhance the integration of new GH concepts, to adapt their knowledge and skills to a GH setting and to foster attitudinal changes and the development of an introspective and humble practice. To feasibly cover the recommended PDT content, universities could train all health students on how to adapt one's practice to multicultural

and low-resource healthcare settings, as we encounter patients from diverse backgrounds in Canada. Then, all students participating in a GHE could receive advanced general GH training and placement-specific training geared towards their GHE location. As most programs collaborate with local healthcare professionals for onsite supervision, universities could clarify the level of supervision required and establish specific learning objectives with the host institutions. Finally, universities could establish mandatory debriefing sessions to allow students to evaluate their experiences, work through difficult situations and review learning objectives. We would encourage programs to evaluate the effectiveness of their training and the impact of their GHEs on local settings to ensure a positive experience with mutual learning and beneficial goals for all involved.

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## TABLES

Table 1. Survey response rate per program and corresponding international low-resource (ILR) placements in Canadian undergraduate medical (MD), physiotherapy (PT) and occupational therapy (OT) programs

	MD	PT	OT
Survey invitations sent out	17	15	13
Survey responses received	11	7	5
Programs offering ILR placements	11	6	5

Table 2. Current support and training practices in Canadian undergraduate medical (MD), physiotherapy (PT) and occupational therapy (OT) programs for placements in international low-resource settings

	MD N=11	PT N=6	OT N=5
Established selection process	7 (63.6%)	6 (100%)	5 (100%)
Mandatory PDT	10 (90.9%)	6 (100%)	5 (100%)
Onsite supervision*	10 (90.9%)	6 (100%)	5 (100%)
Mandatory Debriefing	8 (72.7%)	3 (50%)	4 (80%)

\*by a local or university-recruited health professional

Table 3. Mandatory predeparture training within Canadian undergraduate medical (MD), physiotherapy (PT) and occupational therapy (OT) programs having these types of placements\*

	MD	PT	OT

	N=10	N=6	N=5
Placement-specific groups (just ILR)	6 (60%)	2 (33.3%)	3 (60%)
Who is involved in the training			
The Program	4 (40%)	3 (50%)	3 (60%)
GHO	7 (70%)	6 (100%)	4 (80%)
Peers	2 (20%)	0	2 (40%)
Other	0	0	1 (20%)
Interdisciplinary training activities	7 (70%)	4 (66.7%)	4 (80%)
Average length of training (min-max)	9.1 hours (5-13)	13.2 hours (2-38)	10.5 hours (2.5-35)
Training format			
University courses	1 (10%)	3 (50%)	1 (20%)
Conferences	4 (40%)	2 (33.3%)	2 (40%)
Workshops	10 (100%)	3 (50%)	4 (80%)
Readings	8 (80%)	4 (66.7%)	3 (60%)
Reflective assignments	6 (60%)	1 (16.7%)	2 (40%)
Individual / team meetings	7 (70%)	5 (83.3%)	2 (40%)
Other	4 (40%)	1 (16.7%)	0
Training content			
Global health definition	8 (80%)	3 (50%)	2 (40%)
Global health ethics	10 (100%)	3 (50%)	2 (40%)
Globalisation	7 (70%)	1 (16.7%)	2 (40%)
Culture shock	10 (100%)	3 (50%)	3 (60%)

Partner organization	4 (40%)	3 (50%)	3 (60%)
Student role during placement	10 (100%)	3 (50%)	4 (80%)
Host country culture	7 (70%)	1 (16.7%)	1 (20%)
Host country history and politics	3 (30%)	0	0
Language classes	9 (90%)	2 (33.3%)	3 (60%)
Security and health precautions	10 (100%)	3 (50%)	5 (100%)
What to pack	10 (100%)	2 (33.3%)	4 (80%)
Goals and motivations	10 (100%)	3 (50%)	3 (60%)
Knowing yourself and the group	9 (90%)	2 (33.3%)	2 (40%)
Reverse culture shock	9 (90%)	2 (33.3%)	5 (100%)
Previous student testimonies	6 (60%)	2 (33.3%)	3 (60%)
Other†	2 (20%)	0	0

\*Most answers were not mutually exclusive (multiple-choice answers allowed)

†The *other* category was mainly online training.

Table 4. Supervision and onsite training within Canadian undergraduate medical (MD), physiotherapy (PT) and occupational therapy (OT) programs having these types of placements\*

	MD N=11	PT N=6	OT N=5
Who provides onsite supervision			
Supervisor recruited by the university	1 (9.1%)	1 (16.7%)	4 (80%)
Local supervision	10 (90.9%)	5 (83.3%)	5 (100%)
Remote supervision	2 (18.2%)	2 (33.3%)	4 (80%)

No supervision	1 (9.1%)	0	0
Mandatory onsite training	3 (27.3%)	2 (33.3%)	1 (20%)

\*Most answers were not mutually exclusive (multiple-choice answers allowed)

Table 5. Mandatory GHE debriefing within Canadian undergraduate medical, physiotherapy and occupational therapy programs having these types of placements\*

	MD N=8	PT N=3	OT N=4
Placement specific training (just ILR)	3 (37.5%)	0	1 (25%)
Who is involved in the training			
The Program	2 (25%)	3 (100%)	4 (100%)
Global Health Office	6 (75%)	1 (33.3%)	1 (25%)
Peers	0	1 (33.3%)	2 (50%)
Other	1 (12.5%)	0	0
PDT has interdisciplinary training activities	2 (25%)	1 (33.3%)	2 (50%)
Average length of training (min-max)	3 hours (1-6)	7 hours (6-8)	4.1 hours (2-8)
Training format			
University courses	0	1 (33.3%)	0
Conferences	0	2 (66.7%)	2 (50%)
Workshops	4 (50%)	1 (33.3%)	1 (25%)
Readings	2 (25%)	0	2 (50%)
Reflective assignments	5 (62.5%)	2 (66.7%)	1 (25%)



Individual / team meetings	8 (100%)	2 (66.7%)	2 (50%)
†Other	3 (37.5%)	0	0
Training content			
Reverse culture shock	7 (87.5%)	2 (66.7%)	3 (75%)
Lessons learned and impact	8 (100%)	3 (100%)	4 (100%)
Student discussions about experience	8 (100%)	3 (100%)	4 (100%)
Evaluation of their placement	7 (87.5%)	3 (100%)	3 (75%)
Transfer of skills	4 (50%)	3 (100%)	2 (50%)
‡Other	3 (37.5%)	0	1 (25%)

\*Most answers were not mutually exclusive (multiple-choice answers allowed)

†The *other* category in formats consisted mainly of online debriefing, poster presentations and a potluck supper between students and alumni.

‡The *other* topic in content was *continuing the action*.

## APPENDIX A

### GLOBAL HEALTH PREDEPARTURE TRAINING SURVEY

*This survey aims at identifying current practices, in Canadian universities, in terms of pre-departure training, field supervision and debriefing for students participating in global health placements. For the purpose of this survey, we consider clinical placements, as well as any other global health experience related to the field of study, whether credited or uncredited. In addition, we consider placements abroad in high or low resources settings, as well as placements in Canada within a First Nations' community.*

*Please note that some multiple questions allow you to have multiple answers and others a single answer.*

1. For which university are you filling in this survey?

2. For which program are you filling in this survey?

a) Undergraduate medicine

b) Physiotherapy

c) Occupational therapy

3. What is your role within your program, faculty or university?

a) Clinical coordinator

b) Professor

c) Representative of the global health or international relations office

d) Other (please specify)

*\*For the purpose of this survey, we define a global health placement as a placement in an international setting, in either a high or low resource setting, or as a placement within a Canadian First Nations' community.*

4. Do students in your program participate in global health placements?

a) yes

b) no

5. What type of placements do they participate in?

- a) Credited placements, abroad, in a high resource setting
- b) Uncredited placements, abroad, in a high resource setting
- c) Credited placements, abroad, in a low resource setting
- d) Uncredited placements, abroad, in a low resource setting
- e) Credited placements, in Canada, within a First Nations' community
- f) Uncredited placements, in Canada, within a First Nations' community

*\*Do you have any comments or precisions to make concerning the types of placements mentioned above?*

6. Is there a selection process for students participating in a global health placement?
- a) Yes (please describe briefly)
  - b) No
  - c) Don't know

7. Do students have MANDATORY predeparture training?
- a) Yes (please describe briefly)
  - b) No
  - c) Don't know

*Questions 8 to 13 relate to MANDATORY predeparture training. Please note that in the following question, we ask you if the predeparture training is the same for all types of placements (abroad / in Canada, credited / uncredited, high / low resource setting).*

*Answer "yes" if the outline of the training is similar, in terms of teaching modalities and content, even if the training is not given to all students at the same time. If you answer "no", we will ask you*

*to describe each training individually in order to better assess what is given to students according to the type of placement they participate in.*

8. Is the predeparture training the same for all types of placements?

- a) Yes
- b) No

9. Is the predeparture training the same for all types of placements?

- a) Yes
- b) No

10. Who gives the predeparture training?

- a) Your program
- b) The global health or international relations office
- c) Students (peer teaching)
- d) Others (please specify)

11. Is the predeparture training interdisciplinary?

- a) Yes (please specify the disciplines)
- b) No

12. How many hours would you estimate the predeparture training to be, including preparation time

(e.g. preparatory reading, assignments ...)?

13. What teaching modalities are used?

- a) University courses
- b) Conferences
- c) Workshops
- d) Readings
- e) Reflective assignments
- f) Individual / team meetings
- g) Others (please specify)

14. What content is covered?

- a) Definition of global health
- b) Ethical aspects related to global health
- c) Effects of globalization
- d) Culture shock and cultural adaptation
- e) Presentation of partner organizations
- f) Cultural aspects of the host country
- g) Historical and political aspects of host the country
- h) Language classes
- i) Presentation of the students' tasks and limits during the placement
- j) Security and health precautions
- k) Luggage (what to bring)

- l) Personal and professional goals / motivations
- m) Knowing yourself and the group
- n) Reverse culture shock
- o) Previous students' testimonies
- p) Other themes (please specify)

15. Do students have access to OPTIONAL predeparture training?

- a) Yes (please describe briefly)
- b) No

16. FIELD SUPERVISION: Who supervises students during clinical activities?

- a) Supervisor recruited by the university
- b) Local supervisor or local organization
- c) Remote supervision from the university
- d) No supervision
- e) Don't know

17. Select all the themes for which students have a specific resource person during their placement, whether local or from the university.

- a) Clinical questions
- b) Health problems
- c) Psychological distress (including culture shock)
- d) Conflict with the local partner (placement and/or host family)

- e) No specific resource person
- f) Don't know

18. Are there MANDATORY training sessions offered during the placement (e.g. language classes, discussion groups, cultural outings in order to better understand the social / political context of the host country, etc.)?

- a) Yes (please describe briefly)
- b) No
- c) Don't know

19. DEBRIEFING: Do students have MANDATORY debriefing sessions?

- a) Yes
- b) No
- c) Don't know

*Questions 19 à 24 relate to MANDATORY debriefing sessions. Please note that in the following question, we ask you if the debriefing sessions are the same for all types of placements (abroad / in Canada, credited / uncredited, high / low resource setting).*

*Answer "yes" if the outline of the sessions are similar, in terms of teaching modalities and content, even if the sessions are not given to all students at the same time. If you answer "no", we will ask you to describe the debriefing sessions individually in order to better assess what is given to students according to the type of placement they participate in.*

20. Are the debriefing sessions the same for all types of placements?

- a) Yes
- b) No

21. Who gives the debriefing sessions?

- a) Your program
- b) The global health or international relations office
- c) Students (peer teaching)
- d) Others (please specify)

22. Are the debriefing sessions interdisciplinary?

- a) Yes
- b) No

23. How many hours would you estimate the debriefing sessions to be, including preparation time (e.g. preparatory reading, assignments ...)?

24. What teaching modalities are used?

- a) University courses
- b) Conferences
- c) Workshops
- d) Readings
- e) Reflective assignments
- f) Individual / team meetings



g) Others (please specify)

25. What content is covered?

- a) Reverse culture shock
- b) Lessons learned during the placement and their impact
- c) Student discussions about their experience
- d) Evaluation of their placement
- e) Transfer of skills
- f) Other themes

26. Do students have access to OPTIONAL debriefing sessions?

- a) Yes (please describe briefly)
- b) No

27. Strengths of your overall training, including predeparture training, field supervision and debriefing sessions.

28. Aspects of the overall training that you would like to improve.

29. Would you be interested in sharing some of your resources via a directory of educational resources for medical, physiotherapy and occupational therapy programs wishing to develop their global health training?

- a) Yes

b) No

*Examples of resources: suggested readings (articles, books, ...), suggested videos (documentaries, online videos, ...), course outline-workshop description*

*If you answer "yes", our research assistant will contact you to discuss the resources that you wish to share.*

30. Do you have any final comments or other relevant information to share with us?