Supplementary Data

Virtual Global Health Education Activities (VGHEA) Survey Study

Specific Project Objectives:

- 1. To describe characteristics of current global health education (GHE) programming
- 2. To describe global health education activities (GHEA): both in-person and virtual, and both before and after the COVID-19 pandemic began
- 3. To describe ongoing, new and/or planned **virtual** global health education activities (**V**GHEAs) since the COVID-19 pandemic began
- 4. To determine preferred **V**GHEAs during the COVID-19 pandemic in the next 6 months
- 5. To evaluate trainee and supervisor experience with and preferences for VGHEAs
- 6. To determine perceived benefits and barriers/challenges of VGHEAs
- 7. To identify geographic differences in preferred **V**GHEAs

Acronyms

GH = global health
GHE = global health education
GHEA = global health education activity
VGHE = virtual global health education
VGHEA = virtual global health education activity
VTC = virtual teleconference

Consent questions:

- Are you > 18 years old? Yes/No (STOP survey if NO)
- Do you give your consent to participate in the following survey? Yes/No (STOP survey if NO)

*** Instructions: Please fill out the survey for your global health program. For the purposes of this survey, a *Global Health Education Activity (GHEA)* is defined as any clinical health sciences curricula and/or experiential learning focused on social accountability and rooted in the concepts of equity, cultural sensitivity, and collaborative, interdisciplinary practice of patient and population-centered healthcare. Activities may be clinical, public health, research, community, educational and/or development focused, and they will seek to bridge geographical distance and/or resource levels.

Part A. Characteristics of global health education (GHE) at your institution

OBJECTIVE 1: To describe characteristics of current global health education (GHE) programming

1. Date of assessment

- 2. What is your institution (free text)
- 3. In which country is your institution or organization located, e.g. where do you primarily work? (drop down menu)
- 4. If your site is part of a larger organization, in which country is the headquarters or primary location of your organization located?
 - a. N/A
 - b. Drop down menu (country list)
- 5. What is your current position within your institution or organization? (Choose all that apply)
 - Administrator of hospital, health center or organization
 - Administrator of academic training/teaching program (post-graduate, residency, fellowship, etc.)
 - Clinician
 - Clinician, midlevel or advanced practice provider (nurse practitioner, nurse officer, physician assistant, etc.)
 - Director / president / CEO of organization
 - Fellow
 - Nurse
 - Professor / Lecturer
 - Researcher
 - Resident or chief resident
 - Student, Dental
 - Student, Medical
 - Student, Nursing
 - Student, other pre-professional
 - Other (specify)
- 6. If you are a clinician or clinical trainee, what is your specialty? (Choose all that apply
 - a. Dentistry
 - b. Emergency medical services
 - c. Family Medicine
 - d. General practice
 - e. Internal medicine
 - f. Nursing/Nurse Practitioner
 - g. OB/GYN
 - h. Pediatrics
 - i. Physical Therapy
 - j. Physician Assistant
 - k. Surgery
 - I. Other (specify)

- 7. Are you a focal point at your institution for global health education programs? (We define a *focal point* as someone who is very familiar with the global health program and/or involved in any leadership role with the global health program, whether you are a faculty or trainee) (You may proceed with the survey whether you select yes or no)
 - a. Yes
 - b. No
- 8. If yes, are you responsible for overseeing/teaching global health education activities for any of the following types of trainees? (*Choose all that apply*)
 - a. Fellows
 - b. Residents
 - c. Medical Students
 - d. Nursing Students
 - e. Other (specify)
 - f. N/A I do not have oversight of trainees
 - g. Comments (free response)
- 9. If known, what specialities are represented within your institution's global health education programs? (Choose all that apply)
 - a. Emergency medical services
 - b. Family Medicine
 - c. General practice
 - d. Internal medicine
 - e. Nursing
 - f. OB/GYN
 - g. Pediatrics
 - h. Surgery
 - i. Other (specify)
 - j. I don't know
- 10. Is your institution involved in a *Global Health Partnership* (e.g. a trans- or multinational and/or domestic collaborative health partnership) with another organization or site?
 - a. Yes
 - b. No
 - c. Don't know
- 11. Think about your institution's global health education program. If known, approximately how many **total global health trainees** are actively involved in global health education activities at each of the following levels? (do not include one-time activities that are open attendance)

Medical	Nursing	Other	Resident	Fellow
Student	student	pre-		

,		prof student	
		student	
5 or less			
6-10			
11-20			
21 or more			
Don't know			
Comments			
(free response)			

12. If known, approximately how many **total global health faculty** are actively involved in global health education activities? (May include global health chief resident).

	Medical	Nursing	Other pre-	Resident	Fellow
	Student	Student	prof student		
5 or less					
6-10					
11-20					
21 or more					
Don't know					
Comments (free					
response)					

- 13. Do you have a GH administrative support person?
 - a. Yes
 - b. No
 - c. Don't know
- 14. If yes, does the GH administrative person work for any additional departments and/or programs outside of your global health education program?
 - a. Yes
 - b. No
 - c. Don't know
- 15. Does your institution provide funding for your GH program?
 - a. Yes
 - b. No
 - c. Don't know
- 16. Are there restrictions for how the funds are used?
 - a. Yes
 - b. No
 - c. Don't know

- 17. If yes, for what are the funds used? (check all that apply)
 - a. Education programs and activities at the home institution (including, but not limited to, one-time events)
 - b. Travel / electives for trainees
 - c. Travel / electives for faculty
 - d. Faculty salary support
 - e. Administrative salary support
 - f. Support for training supplies
 - g. Support for guest speakers (e.g., honoraria)
 - h. Refreshments for global health events
 - i. Funding for research support (e.g., seed grants)
 - j. Other (specify)
 - k. Don't know
 - I. Comments (free response)
- 18. Did the COVID-19 pandemic affect the amount of funding for your institution's global health education program?
 - a. Increase funding
 - b. Decrease funding
 - c. No change in funding
 - d. There is no funding for global health education at my institution
 - e. Don't know
 - f. Comments (free response)
- 19. Based on your answer to the previous question, please indicate the percent change to your institution's GH funding on the following scale. (0-100% slide bar)

Part B. How did the COVID-19 pandemic affect existing global health education activities (GHEAs), including in person or virtual activities

OBJECTIVE 2: To describe global health education activities (GHEA): both in-person and virtual, and both before and after the COVID-19 pandemic began

OBJECTIVE 3: To describe ongoing, new and/or planned **virtual** global health education activities (**V**GHEAs) since the COVID-19 pandemic began

OBJECTIVE 4: To determine preferred **V**GHEAs during the COVID-19 pandemic in the next 6 months

OBJECTIVE 5: To evaluate trainee and supervisor experience with and preferences for **V**GHEAs

20. Of the following examples of global health educational activities (both in-person and virtual), please indicate which activities were in place pre-pandemic; have been implemented since the pandemic began; and will be implemented in the next 6 months. If your institution has no plans to implement an activity, please

also indicate which activities you would or would not like to implement at your institution.

You will be prompted to complete each table based on your training level **OR** on the level of trainee(s) that you oversee.

(Select all that apply in the table)

TABLE 1 – Global Health (GH) Education Activities (Repeated per training level or per level(s) of trainees supervised, e.g. 1x/each for: Med Student / Resident / Fellow / Nursing Student / Other preprofessional student)	Ongoing before pandemic	New since pandemic	Plan on implementing in the next 6 months	Interested but no current plan to implement	Not interested in implementing
Access to Global Health Educational Activities and Materials					
Trainees have online access to my institution's library services (e.g. librarian consults, document searches, interlibrary loans, etc.)					
Trainees have online access to journals/publications behind paywalls through our library					
Trainees have access to web-based subscription services (e.g. UpToDate)					
Trainees have online access to GH educational materials or curricula created by my institution (simulation cases, etc.)					
Trainees have IN PERSON access to GH course lectures, grand rounds, case discussions or journal clubs					
Trainees have VIRTUAL access to GH course lectures, grand rounds, case discussions or journal clubs					
My institution hosts IN PERSON GH conferences, meetings, predeparture trainings, workshops, or round-table discussions					
My institution hosts VIRTUAL GH conferences, meetings, predeparture trainings, workshops, or round-table discussions					
Access to Global Health Elective Activities					
Local IN PERSON GH experiences (e.g. engagement during electives, rotations or longer placements with partner organizations within my institution's catchment area)					
Local VIRTUAL GH experiences (e.g. engagement during electives, rotations or longer placements with partner organizations within my institution's catchment area)					

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Domestic IN PERSON GH experiences (e.g. engagement during electives,			
rotations or longer placements with partner organizations outside of my			
institution's catchment area but within the same country)			
Domestic Virtual PGH experiences (e.g. engagement during electives,			
rotations or longer placements with partner organizations outside of my			
institution's catchment area but within the same country)			
International IN PERSON GH experiences (e.g. engagement during electives,			
rotations or longer placements with partner organizations outside of my			
institution's home country)			
International IN PERSON GH experiences (e.g. engagement during electives,			
rotations or longer placements with partner organizations outside of my			
institution's home country)			
My institution hosts trainees from outside my institution IN PERSON			
My institution hosts trainees from outside my institution VIRTUALLY			
IN PERSON participation in local public health or community outreach			
initiatives			
VIRTUAL participation in local public health or community outreach			
initiatives			
Access to Global Health Certification and Mentorship			
Trainees have a global health mentor for career development,			
scholarly activities, etc.			
My institution offers a GH pathway/track/certificate program for			
trainees			
My institution conducts an IN-PERSON GH career day			
My institution conducts a VIRTUAL GH career day			

Comments (free response)

Table 2

21. Of the following examples of global health educational activities within a global health partnership (both in-person and virtual), please indicate which activities were in place pre-pandemic; have been implemented since the pandemic began; and will be implemented in the next 6 months. If your institution has no plans to implement an activity, please also indicate which activities you would or would not like to implement at your institution.

(Select all that apply)

TABLE 2 Global Health (GH) Education Activities of GH Partners	Ongoing before pandemic	New since pandemic	Plan on implementing in the next 6 months	Interested but no current plan to implement	Not interested in implementing
Access to Global Health Education Activities and Materials					
Trainees from my GH partner institution(s) have online access to my					
institution's library services (e.g. textbook access, document searches, etc.)					
Trainees from my GH partner institution(s) have online access to journals					
publications behind paywalls through our library					
Trainees at my GH partner institution(s) have access to web-based					
subscription services (e.g. UpToDate)					
Trainees at my GH partner institution(s) have online access to educational					
materials created by my institution (e.g. recordings of lectures)					
Trainees at my GH partner institution(s) have access to GH educational					
materials or curricula created by my institution (simulation cases, etc.)					
Trainees at my GH partner institution(s) have access to GH course lectures or					
grand rounds or case discussions					
My institution hosts GH conferences, meetings, pre-departure trainings,					
workshops, or round-table discussions for my GH partner institution(s)					
Trainees or faculty at my institution's GH partner site(s) create curricula or					
educational materials for my institution					

Trainees or faculty at my institution's GH partner site(s) create GH simulation cases for use by either partner		
Face to Face Partnership Educational Activities		
Joint virtual journal clubs between my institution and our GH partner(s)		
Joint virtual didactic medical education sessions, trainee audience: trainees		
from my institution's GH partner site(s) prepare/deliver a joint education		
session		
Joint virtual Grand Rounds, faculty and/or trainee audience		
Joint virtual case discussions: faculty or trainees at my institution's GH		
partner site(s) prepare/deliver a joint case discussion		
Virtual GH simulation cases for my institution's GH partner site's trainees		
and or faculty		
Global Health Clinical Care Activities with GH Partners		
Virtual ward rounding – trainees/faculty from partner sites attend each		
other's clinical rounds by video conference (e.g. Zoom, FaceTime, WhatsApp,		
Skype, etc.)		
Virtual laboratory rounds - trainees/faculty from partner sites attend each		
other's' microbiology rounds by video conference (e.g. Zoom, FaceTime,		
WhatsApp, Skype, etc.)		
Virtual specialist case referrals – specialists at both sites complete virtual		
consults on partner cases		
Trainees or faculty at my institution's GH partner site(s) have access to		
telemedicine platforms hosted by my institution		
Participation in local public health or community outreach initiatives		
Collaborative Global Health Scholarly Activities	 	
Mutually identifying knowledge or practice gaps – trainees paired with		
faculty mentors at either location to virtually collaborate		
Collaborative trainee scholarly projects – matching trainees from each GH		
partner site to facilitate completion of required trainee project(s) (e.g. for		

collaborative literature reviews, contacting specialists, fill knowledge gaps,			
etc.)			
Joint research opportunities (e.g. Literature reviews, project proposals, IRB			
submissions, etc.)			
Joint abstracts, presentations, and/or manuscript opportunities			
Trainees or faculty at my institution's GH partner(s) site(s) may apply for			
research/project funding through my institution			
Trainees or faculty from my institution's GH partner site(s) can virtually			
access support from my organization's ethical review board services			

Part C. Benefits, Barriers and Challenges to virtual global health education activities (VGHEAs) during COVID-19.

OBJECTIVE 6: To determine the perceived benefits and barriers/challenges of VGHEAs

OBJECTIVE 7: To identify geographic differences in preferred VGHEAs

- **22.** In your opinion, what are the **benefits** of virtual global health education activities (either from your own experience or from what you imagine could be a benefit). (Choose all that apply).
 - a. Virtual GH education initiatives would be complementary to existing GH activities at my organization.
 - b. Lay a foundation for virtual GH education activities in place even after inperson activities resume
 - c. Access to resources
 - d. Access to clinical opportunities
 - e. Access to professional support/mentorship
 - f. Maintaining GH partnerships during the pandemic
 - g. Improving technical capacity / understanding of virtual initiatives within the institution
 - h. Reaching more trainees than otherwise available
 - i. Allow educational endeavors to be safer amidst the COVID-19 pandemic
 - j. Allows for career advancement despite pandemic-related restrictions
 - k. Allow for less-costly GH education activities to continue
 - I. Other
 - m. Comments____
- **23.** In your opinion, what are the **barriers and challenges** of virtual global health education activities (either from your own experience or from what you imagine could be a barrier or challenge). (Choose all that apply).
 - a. Cost of training faculty/staff/trainees in virtual partnership initiatives
 - b. Time needed to train faculty/staff/trainees in virtual partnership initiatives
 - c. Lack of space/facilities that could be dedicated to virtual partnership initiatives (e.g. conference rooms, simulation centers)
 - d. Lack of institutional support (financial, policy, etc.) for virtual partnership initiatives
 - e. Lack of equipment to be used in virtual education, such as for simulation exercises
 - f. Lack of formal training curriculum for virtual partnership initiatives
 - g. Lack of mentors/local champions for virtual partnership initiatives at my site
 - h. Lack of consistent/reliable internet access to support virtual partnership initiatives

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i.	Other
j.	Comments
•	anticipate either continuing your institution's virtual global health
	ion activities or implementing new ones after the pandemic ends?
a.	Yes
b.	No
c.	Undecided
25. Other	comments about virtual GHEAs?
26. May w	re contact you in the future for additional study participation?
a.	Yes
b.	No
Preferred email a	ddress

Figure 1A-B. Greatest perceived benefit and challenge for virtual global health education activities among respondents (N=28)



