



**AAFP GLOBAL HEALTH SUMMIT**  
*Primary Health Care and Family Medicine: Health Equity for All*

**The Returning Resident:**  
 exploring the impact of a short-term global health experience on post-graduate trainees

Jacob Nettleton MD, MPH  
 Anna McDonald MD, MPH  
 Anne Marie Williams MD  
 Collin Schenk MD

**Background & Rationale**



4 AMERICAN ACADEMY OF FAMILY PHYSICIANS

**OBJECTIVES**

- Understand the breadth of literature assessing the impact of STEGHs on visiting medical trainees
- Discuss the themes gleaned from the analysis of resident debrief reports and interpret the significance of these themes as they relate to global health programming
- Consider ways to improve the debrief process in order to glean the most useful information and guide actionable response

2 AMERICAN ACADEMY OF FAMILY PHYSICIANS

**LITERATURE REVIEW**

Am. J. Trop. Med. Hyg., 83(5), 2010, pp. 1178-1182  
 doi:10.4269/ajtmh.2010.10.0527  
 Copyright © 2010 by the American Society of Tropical Medicine and Hygiene

**Global Health Training**  
 Ethics and Best Practice Guidelines for Training Experiences in Global Health

John A. Crump,\* and Jeremy Sugarman,\* and the Working Group on Ethics Guidelines for Global Health Training (WEIGHT)†

Possible domains of interest:

- Elective logistics
- Participant health & safety
- Experiences (ex. ethical dilemmas)
- Reintegration post-elective
- Impact (on host site as well as future career)



5 AMERICAN ACADEMY OF FAMILY PHYSICIANS

**OUTLINE**

- Rationale
- Literature Review
- Program Overview
- Methods
- Findings
- Discussion



3 AMERICAN ACADEMY OF FAMILY PHYSICIANS

**Literature Review**

Reflections on trainees' experiences abroad:

- Logistics and specific programmatic review
- Short-term impact
- Long-term/career impact
- Experiential learning\*



6 AMERICAN ACADEMY OF FAMILY PHYSICIANS

### PROGRAM OVERVIEW: MALAWI/WWAMI EXCHANGE PROGRAM



UNIVERSITY OF MALAWI  
COLLEGE OF MEDICINE



Seed  
GLOBAL HEALTH



Providence  
St. Joseph Health



WWAMI  
NETWORK

7
AMERICAN ACADEMY OF FAMILY PHYSICIANS

### The Malawi/WWAMI Global Health Program: The goals

- US residents visiting Malawi
  - Clinical support
  - modeling of family medicine principles
  - Building relationships, sharing values
  - Teaching students of all disciplines; facilitating multi-disciplinary approach to patient care
  - Supporting QI projects
  - Building team leadership



10
AMERICAN ACADEMY OF FAMILY PHYSICIANS

### The Malawi/WWAMI Global Health Program:

- **2013:** Global Health Service Partnership (GHSP) formed
- **2014:** academic partnership piloted in Blantyre
- **2015:** 1st WWAMI residents to Mangochi District Hospital
- **2017:** 1st Malawian residents to Seattle for elective
- **2019:** Partnership solidified and funding committed by PSJH



8
AMERICAN ACADEMY OF FAMILY PHYSICIANS

### The Malawi/WWAMI Global Health Program: The goals

- Malawian registrars visiting US
  - Exposure to clinical medicine /primary care in a different context
  - Self-identified clinical areas of interest (adolescent, geriatric, sports medicine)
  - Building relationships, sharing values (UW Global Health Leadership, AAFP GH Summit)
  - Learn about clinical teaching by shadowing attendings
  - Develop leadership skills
  - Observe multi-disciplinary care model



11
AMERICAN ACADEMY OF FAMILY PHYSICIANS

### The Malawi/WWAMI Global Health Program: The components

- Bidirectional exchange
- Protection of host-country national resources (human & material)
- Prioritization of host-country learning needs



9
AMERICAN ACADEMY OF FAMILY PHYSICIANS

### PROGRAM EVALUATION

- Medical students evaluate US residents (monthly)
- MDH staff evaluation of residents (yearly)
- Debrief with US residents
  - In Malawi
  - Upon return to US



12
AMERICAN ACADEMY OF FAMILY PHYSICIANS

## Special Thanks to Carrie Schonwald



- Interviews with all returning residents
- Financial support via PSJH Global Partnerships

13

AMERICAN ACADEMY OF FAMILY PHYSICIANS

## Resident as Learner

*I also learned a lot from the CO's in the female ward. They had very different ways to approach disease processes. **I had to remember that I was not the expert on what is common in Malawi, looking at it from an outsider's perspective.***

*I learned a ton from the **medical students** also because they were **experts at illnesses not familiar in the US and also the system--** but we also learned together about what was possible and what wasn't.*

16

AMERICAN ACADEMY OF FAMILY PHYSICIANS

## METHODS

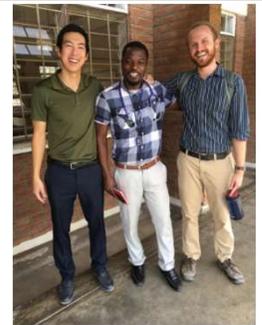
- Interviews of 12 residents were conducted after they returned to the U.S. Memos were written by the interviewer.
- AMW created a codebook based on 2 interviews. CS applied the codebook to assess for reliability. CS and AMW coders then open coded all memos.
- Six themes emerged from the 49 codes.

14

AMERICAN ACADEMY OF FAMILY PHYSICIANS

## Resident as Learner

- **Learning from everyone**
- **Knowledge in tropical diseases**
- Technical skills
- Fundamentals of clinical medicine
- Systems thinking



17

AMERICAN ACADEMY OF FAMILY PHYSICIANS

## FINDINGS

6 major themes:

- Resident visitor as learner
- Resident visitor as teacher
- Perspective changes
- Impact on professional values and goals
- Processing challenges
- Developing community and partnerships



15

AMERICAN ACADEMY OF FAMILY PHYSICIANS

## Resident as Teacher

*I enjoyed the opportunity to work as a leader- consultant on the ward--to teach trainees on how to assess patients and work through medical decision making.*

***Sometimes there aren't a lot of other clinicians there and you have to make a personal decision whether or not to direct the care more aggressively in emergent moments (life or death). But still in the back of your mind wondering if this is the right thing to do-- should I flag someone down and get someone else to do what is needed and have the teaching and learning happen.***

18

AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Resident as Teacher

- Teaching clinical knowledge and reasoning
- Residents recognized their role should be as a facilitator
- Teaching across multiple settings: didactics and wards
- Teaching limitations: resources and learners



19

AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Impact on Professional Values and Goals

*In our case specifically, we had already talked about doing global health work in the future- this helped us solidify what we would want that to look like and how we could do that together. **This experience made that a lot more real and that made it feel a lot more tangible and possible.***

*When I left for Malawi, I was feeling a bit tired and burnt out and being in Malawi re-lit the fire. I can see why it should really be done in third year, because you have more skills and you are more needing that reminder of why you chose family medicine. **To remember not just the how but also the why.***

22

AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Perspective Changes

*What stands out to me the most is the **perspective on the lack of resources and how amazing the providers over there are, how much work they have to do and the training they need to go through, it was just so eye opening...It really put in perspective their workload and what they had to do with their amount of training compared to ours. The registrars are constantly on call. Surgery, obstetrics, medicine, outpatient clinic, etc. They were just amazing. That is what I brought back.***

20

AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Impact on Professional Values and Goals

- Interest in global health: strengthened, clarified
- Affirmation of professional values
- Increased comfort with working in low resource settings that require broad spectrum of training
- Barriers include impact on personal lives



23

AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Perspective Changes

- Medical privilege in the U.S
- Medical crisis and severity of illness
- Coping methods



21

AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Processing Challenges

*I saw a two month old baby of a patient on the ward who was clearly malnourished and tried to connect the baby to the nutrition group, but that was not regarded as an appropriate connection because relatively in Malawi, the fact that the baby at two months weighed less than it did at birth that is not that bad compared to other babies in Malawi, and that was hard. Even in the moment it is hard to understand what is most upsetting to you. **I think global health takes a lot of restraint** and it was easy to see how you overstep based on emotions. **The long game is learning how to be self-aware in those situations.***

24

AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Processing Challenges

- Rationing of time and resources
- Cultural humility
- Differences in work behaviors



25 AMERICAN ACADEMY OF FAMILY PHYSICIANS

### DISCUSSION



28 AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Developing Community and Partnerships

*The relationships we developed with the CO's- who send me WhatsApp messages and seek counsel, etc. **Those relationships were the biggest impact I could offer.***

*There was some equipment that was only available to the FM program, which created an interesting dynamic. Which could be strange- almost like a non-integrated system. Likewise with the HIV supplies. **This can make it difficult for the Malawian providers to understand what "we" are doing there.***

26 AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Lit Review vs. Our Themes

- Short term impact
- Career impact
- Logistics
- Experiential learning

- Resident visitor as learner
- Resident visitor as teacher
- Perspective changes
- Impact on professional values and goals
- Processing challenges
- Developing community and partnerships

Most analysis points could be applied to either framework.

29 AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Developing Community and Partnerships

- Meaningful relationships with local providers
- Limitations on relationships
- Valued pre-departure orientation



27 AMERICAN ACADEMY OF FAMILY PHYSICIANS

### Novel Analysis Points

- Learned to think about systems
- Recognize role as facilitator
- Find meaning in relationships with local providers



30 AMERICAN ACADEMY OF FAMILY PHYSICIANS

## Professional Identity Transformation

Pre-departure professional identity	Disorientation	Experiential learning	Transformed professional identity
<p>"I had a very narrow view of what my scope was before going to Malawi."</p>	<p>Caused by:</p> <ol style="list-style-type: none"> <li>1) Lack of local disease and systems knowledge</li> <li>2) Lack of relied upon clinical tools</li> </ol>	<p>"Some days the power would go off, or we couldn't get any labs or there were no antibiotics which forced you to be very creative... The experience improved my clinical reasoning and critical thinking skills."</p>	<p>Regrounding in the fundamentals of clinical medicine, with the humility and flexibility needed to learn in difficult contexts</p>

31
AMERICAN ACADEMY OF FAMILY PHYSICIANS



Zikomo kwambiri!

34
AMERICAN ACADEMY OF FAMILY PHYSICIANS

## LESSONS LEARNED

- GH workforce pipeline
- Re-address reasons for study:
  - reaffirm/strengthen interest
  - no frank disillusionment
- clarifying active ingredients of ethical involvement



32
AMERICAN ACADEMY OF FAMILY PHYSICIANS

## References

Greyson SR, Richards AK, Coupet S, Desai MM, Padela A. Global Health experiences of US Physicians: a mixed methods survey of clinician researchers and health policy leaders. *Globalization and Health*. 2013; 9: 19-29.

Grissom MO, et al. Mapping residency Global Health experiences to the ACGME Family Medicine Milestones. *Fam Med*. 2017; 49(7): 553-557.

Gupta AR, Wells CK, Horwitz RI, Bia FJ, Barry M, 1999. The international health program: the fifteen-year experience with Yale University's internal medicine residency program. *Am J Trop Med Hyg* 61: 1019-1023.

Jeffrey J, Dumont RA, Kim GY, Kuo T. Effects of international health electives on medical student learning and career choice: results of a systematic literature review. *Fam Med*. 2011;43:21-8.

Haa C, Rotherberg D, Gjerde C et al. New world views: preparing physicians in training for global health work. *Fam Med*. 2000; 32(8): 566-572.

Hutchinson E, Kerry V, Sayeed S. What does a mutually beneficial Global Health Partnership in Family Medicine residency look like? *AMA Journal of Ethics*. 2019;21(9): E759-765.

35
AMERICAN ACADEMY OF FAMILY PHYSICIANS

## FUTURE DIRECTIONS

- Collect more data!
- Continue seeking the active ingredients
  - Types of programming
- Further investigate our unique findings
- Pose the same questions to our Malawian colleagues!



33
AMERICAN ACADEMY OF FAMILY PHYSICIANS

## References

Alturi J, et al. The ethical experiences of trainees on short-term international trips: a systematic qualitative synthesis. *BMC Medical Education*. 2018; 18: 324-329.

Balmer DF, Marton S, Gillespie SL, Schutze GE, Gill A. Reentry to pediatric residency after global health experiences. *Pediatrics*. 2015; 136(4): 680-686.

Crump, JA, & Sugarman, J. (2010). Global health training: ethics & best practices guidelines for training experiences in global health. *Am J Trop Med Hyg*. 83(6): 1178-1182.

Crump JA, Sugarman J. Ethical considerations for short-term experiences by trainees in global health. *JAMA*. 2008; 300(12): 1456-1458.

Drain PK, et al. Global health training and international clinical rotations during residency: current status, needs, and opportunities. *Acad Med*. 2009; 84(3): 320-325.

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

36
AMERICAN ACADEMY OF FAMILY PHYSICIANS

## References

- Nordhuus H, et al. Graduate medical education competencies for international health electives: A qualitative study *Medical Teacher*. 2017;39(11):1128-1137.
- Palazuelos D, et al. Training toward a movement: Career development insights from the first 7 years of a Global Health Equity Residency. *J Grad Med Ed*. 2018; 10(5):509-516.
- Peluso MJ, Forrestel AK, Hafler JP, Rohrbaugh RM. Structured Global health programs in US medical schools: a web-based review of certificates, tracks and concentrations. *Acad Med*. 2013;88(1): 124-130.
- Petrosoniak A, McCarthy A, Varpio L. International health electives: thematic results of student and professional interviews. *Med Educ*. 2010;44:683-9.
- Purkey, E, & Hollaar, G. (2016). Developing consensus for post-graduate global health electives: definitions, pre-departure training, and post-return debriefing. *BMC Med Educ*. 16:159.
- Ramsey AH, Haq C, Gjerde C, Rothenberg D, 2004. Career influence of an international health experience during medical school. *Fam Med* 36: 412-416.

37

AMERICAN ACADEMY OF FAMILY PHYSICIANS



## References

- Russ, CM, et al. (2017). A study of global health elective outcomes: a pediatric residency experience. *Global Pediatric Health*, 4: 1-12.
- Sawatsky AP, Rosenman DJ, Merry SP, McDonald FS. Eight years of the Mayo International Health Program: what an international elective adds to resident education. *MayoClin Proc*. 2010;85(3): 320-325
- Sawatsky et al. Transformative learning and professional identity formation during international health electives: A qualitative study using grounded theory. *Academic Medicine*. 2018;93(9): 1381-1390.
- 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: 342-347

38

AMERICAN ACADEMY OF FAMILY PHYSICIANS

© 2018 American Academy of Family Physicians. All rights reserved.

All materials/content herein are protected by copyright and are for the sole, personal use of the user.

No part of the materials/content may be copied, duplicated, distributed or retransmitted in any form or medium without the prior permission of the applicable copyright owner.

39

AMERICAN ACADEMY OF FAMILY PHYSICIANS