Hindawi Publishing Corporation Education Research International Volume 2012, Article ID 603270, 7 pages doi:10.1155/2012/603270

## Review Article

# **Evidence of Reciprocity in Reports on International Partnerships**

### Rachel A. Umoren, 1 Jasmine E. James, 1 and Debra K. Litzelman 2

- <sup>1</sup> Neonatal-Perinatal Medicine, Department of Pediatrics, Indiana University School of Medicine, 699 Riley Hospital Drive, RR 208, Indianapolis, IN 46202, USA
- <sup>2</sup> Department of Medicine, Indiana University School of Medicine, 1050 Wishard Boulevard RG 5120, Indianapolis, IN 46202, USA

Correspondence should be addressed to Rachel A. Umoren, rumoren@iupui.edu

Received 19 November 2011; Revised 29 January 2012; Accepted 29 January 2012

Academic Editor: Eric Z. F. Liu

Copyright © 2012 Rachel A. Umoren et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The increase in global health opportunities in medical education has been accompanied by calls for ethical and reciprocal institutional partnerships. The Working Group on Ethics Guidelines in Global Health Training (WEIGHT) guidelines were developed in 2010 and are widely accepted by the global health community. We reviewed 43 articles on international partnerships from 1970 to 2010 for eight principles of reciprocity derived from the WEIGHT guidelines. The results showed that, while few articles reflected all principles, there was a trend to increasing consideration of the international partner's local needs, predeparture cultural training, and collaborative authorship. However, learner supervision and consideration of local cost/benefit ratios decreased over the same time period. Partnerships with only one international partner or with institutional partners in Africa had lower reciprocity scores than those with two or more partners and institutional partners in Asia and South America. We recommend that a new focus on ethics in global health partnerships leads to the inclusion of the principles of reciprocity in model program descriptions in order to enable and encourage ethical, sustainable, and mutually beneficial institutional partnerships.

#### 1. Introduction

Historically, medical missions embody medicine's core values of altruism and social responsibility [1]. Physicians responding to the inequities in access to health care across the world volunteer their services to help those in need. However, clinical service in international settings has been tainted by ethical questions. Do learners volunteer because they are seeking an adventure, that is, "voluntourism"? Are research activities in resource-limited settings taking advantage of vulnerable populations? Due to these concerns, there have been many calls for local institution ownership, sustainability, development of national research capacity [2-5], and the establishment of ethical guidelines for global health experiences [6-9]. In parallel with the development of these guidelines, the opportunity for first-hand experiences in global health has become increasingly available to health professionals at all levels of training.

Nearly all US medical schools have allowed third or fourth year medical students to study overseas [10]. In 2010,

30% of graduating American medical students participated in a global health experience compared with 6% in 1984 [11, 12]. Global health programs have been developed at all levels of medical training and across multiple disciplines. A focus on global medicine can amplify the impact of North American academic research, education, and clinical care missions and prepare academic health science systems for the challenges of a rapidly changing world [13].

In 2010, the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) group published a set of guidelines to address the multiple stakeholders involved in global health training. These guidelines are meant to address global health experiences of varying duration and levels of formality, trainees of multiple levels and disciplines, uniand bidirectional exchanges, and the clinical, public health, research, and educational activities that take place under the umbrella of global health [14]. The WEIGHT guidelines for global health training programs represent an important effort to codify ethics and best practices for sending and host institutions, program participants, and sponsors.

**Education Research International** 

Even with these published guidelines, there is a great deal of variability in published reports on global health programs. Specifically, many authors may not discuss their global health program's adherence to ethical guidelines for reciprocity in international partnerships. The failure to adequately describe this essential element of sustainable partnerships may lead to new programs being established in good faith, but without measures to ensure sustainability through an ethical and reciprocal partnership. In order to describe the extent of this problem, we undertook a review of global health program descriptions in published literature to determine the degree to which programs describe their adherence to ethical principles outlined in the WEIGHT guidelines, particularly those principles that demonstrate reciprocity in international partnerships.

#### 2. Method

We defined "reciprocity" in this context as actions that show mutual respect and seek mutual benefit between the institutional partners. Using the WEIGHT group guidelines, we selected eight ethical principles that demonstrate reciprocity in partnerships. A systematic literature search of indexed, English-language journals using Ovid Medline (National Library of Medicine (NLM), 1966–2010), World of Science, ERIC, Google, and LISTA electronic databases was performed using major Medical Subject Headings (MeSHs) and text words:

Students, Medical (exploded)
OR
Education, Medical (exploded)
OR
Internship and Residency (exploded)
AND
International Cooperation (exploded) includes....
Developed Countries
Developing Countries
International Educational Exchange
Medical Missions, Official
AND

Partner\$ OR collabora\$ [searched as keywords, truncated].

The search yielded 3,980 citations. Of these, 390 citations were identified based on titles and abstracts as appearing relevant. Additional articles were gathered through individual journal searches and by evaluating selected references cited in articles. Only articles describing institutional programs with short-term (less than 1 year in duration) international exchanges were selected. Opinion pieces, non-English language reports, and anecdotal reports were excluded. Fortythree articles were found to contain descriptions of international partnerships and were selected for review. Full text versions of selected articles were examined independently by two authors (R. A. Umoren and J. E. James) for evidence of adherence to eight principles of reciprocity included in the ethical guidelines for international partnerships proposed by the WEIGHT group. The input of a third author (DL) was sought where there was disagreement. The articles were

assessed for the following eight principles of reciprocity derived from the WEIGHT group guidelines:

- (1) existence of a memorandum of understanding between institutions,
- (2) consideration for local needs and priorities in program activities,
- (3) learner activities and supervision correspond to level of training,
- (4) costs and benefits to host considered or assessed,
- (5) predeparture training for learners on sociocultural, political and historical aspects of host community and research ethics (if applicable),
- (6) met host and sending country requirements on licensing standards, visa policies, privacy and security of patient information, and so forth,
- (7) obtained local ethics committee approval for research activities (if applicable), and
- (8) inclusion or acknowledgement of host input in authorship of publications.

#### 3. Results

The articles selected described institutional programs in undergraduate and graduate medical education. There were 34 Resource-rich or North partners from North America [10, 14–43], 2 from Europe [44–46], 3 from Asia [17, 47, 48], 1 from Australia [49], and 2 from the Middle East [34]. Resource-limited or South partners included 14 from South America [15, 18–20, 23, 28, 30, 32, 36, 41–45, 50, 51], 4 from Europe [35, 36, 48, 52], 12 from Asia [10, 17, 20, 22, 23, 31, 34, 36, 44, 45, 50, 51, 53, 54], 21 from Africa [10, 14, 15, 19, 20, 22–27, 29, 31, 34, 36–40, 44, 46, 51, 55], and 2 from the Middle East [24, 44]. Some North institutions described partnerships that included up to 8 South partners. Nearly all disciplines were represented. The majority of learners in global health programs are involved in clinical service activities with approximately one-half of learners conducting some form of research or educational activity while at the global health site. About one-quarter of the programs included training for learners in the host institutions either directly or indirectly. These training programs generally had a research focus with host faculty development programs in research methods (see Table 1).

Each article was examined closely for statements that indicated that the program design and operation met the selected principles for reciprocity in international partnerships. The results are shown in Table 2.

Most of the program descriptions were published in the last 5 years reflecting the growing interest in global health programs and partnerships. We identified decreasing trends across time in reports on learner supervision and local cost/benefit ratio consideration. There was a peak in descriptions of predeparture cultural training in the early 2000s with a decrease in the later part of the decade. On the other hand, programs were more likely to identify local needs and more

Education Research International 3

TABLE 1: Targeted learners and type of activities in host country.

Targeted learners	
Sending institution medical students	18 (42%)
Sending institution residents	23 (53%)
Host institution medical students	3 (7%)
Host institution residents/fellows	8 (19%)
Learner activities in host country	
Clinical service	33 (77%)
Research	21 (49%)
Education	20 (47%)

TABLE 2: Principles of Reciprocity in Published Descriptions of Global Health Programs.

Principles of reciprocity assessed in 43 published reports on global health programs	Number of reports (%)
(1) Memorandum of understanding (MOU)	5 (1.2)
(2) Met host and sending country requirements on licensing standards, visa policies, and privacy and security of patient information	2 (4.7)
(3) Learner activities and supervision correspond to level of training	27 (63.8)
(4) Predeparture training for learners on sociocultural, political, and historical aspects of host community and research ethics (if applicable)	13 (27.9)
(5) Consideration for local needs and priorities in program activities	22 (51.1)
(6) Costs and benefits to the host considered or assessed	11 (25.6)
(7) Obtained local ethics review committee approval (if trainee conducting research) ( $N = 13$ )	2 (15.4)
(8) Collaborative authorship (inclusion or acknowledgement of host faculty input in authorship of publications)	9 (20.9)

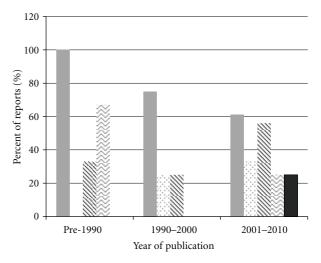
likely to have collaborative authorship in the more recently published reports (see Figure 1).

We assigned one point to each principle of reciprocity and calculated the average reciprocity score for each program. Scores were lowest for institutions with a single partner (see Figure 2) and higher in programs with more than one international partner.

Scores differed with the location of the host institution. Resource-rich programs with host institutions in South America were more likely to have a higher average reciprocity score of 2.65 (out of a possible 8 points), compared with programs with institutional partners in Africa or Asia (see Figure 3).

#### 4. Discussion

A first sign of commitment to the partnership is an agreement on collective goals often incorporated into a memorandum of understanding. Poorly defined program goals and the absence of a memorandum of understanding can lead to short-term partnerships that do not address or meet the



- Learner supervision (any faculty)
- : Cultural training
- N Local need identified
- Local cost/benefit ratio considered
- Collaborative authorship

FIGURE 1: Principles of reciprocity in published reports on global health partnerships from 1970 to 2010.

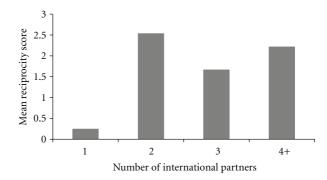


FIGURE 2: Average reciprocity score in relation to number of international partners.

needs of the host partner. Although many reports included program objectives from the perspective of the sending institution, there were few references to a memorandum of understanding between institutional partners.

Few reports identified or stated that their partnerships met host country requirements for licensing and clinical practice although licensing and visa issues are often the reason for excluding international physicians from medical exchange visits to the sending institution. This exclusion occurs despite the fact that many South partners have a need for programs that focus on faculty development and continuing education. Faculty exchanges, with an emphasis on educational programs for early career faculty from both institutions, should be encouraged as part of a reciprocal partnership.

Trainees have the potential to do more harm than good in unfamiliar settings when they exceed their actual capabilities. Overall, 64% of programs reported learner supervision.



FIGURE 3: Average reciprocity score differs by location of south partner of the north institution.

However, during the period from 1970 to 2011, there was a gradual decrease in stated learner supervision by either local or sending institution faculty. This trend was more pronounced in programs describing multiple partner sites. This is likely due to the difficulty in establishing a schedule for on-site faculty at multiple sites, and the overwhelming increase in learners outstripping faculty resources to monitor and mentor trainees. Although local faculty supervision may well be appropriate for the varied level of learners, levels of autonomy for practice differ among international sites and medical training institutions' accrediting bodies. Sending institution learners should receive a higher level of supervision for clinical activities in an international location where disease processes and patterns may be unfamiliar. This is particularly true with the decreased time devoted to tropical medicine in the North American curriculum over recent decades. Moreover, host institution faculty may be unable to give specific feedback because they are not familiar with the desired educational goals of the sending institution's programs [55].

Training programs must prepare learners with the knowledge and framework to approach these experiences in a principled and professional way through formal preparation for both clinical and ethical challenges of working in resource-poor settings [3, 56]. Although the number of programs reporting predeparture cultural training increased over the period under study, only 27% of programs reported predeparture cultural training. This is consistent with previous reports that fewer than 30% of learners participate in programs to prepare them for their international experience [57]. Learners that understand local customs, beliefs, and practices prior to working in such settings will be more likely to contribute and learn than those whose attitude is that their clinical skills and knowledge are already superior to those of local care providers.

On a positive note, identification of local needs and priorities is on the rise. For example, more North partners are ensuring that their proposed projects involve research or program development that is relevant to the health issues of underserved populations, fulfill a need that is agreed on by the host organization such as faculty development [15], or are based on local community needs assessments [30, 32]. This is consistent with the current focus on host community and institutional needs. Although there is a clear need for

assessment of the local cost/benefit ratio of the partnership's activities, this has not been a focus of recent program evaluations.

Although the higher reciprocity scores of programs with more than one partner institution likely reflects an institutional commitment to international activities that is broad based, it is interesting to note that programs with partners in South America and Asia tend to have a higher scores on reciprocity than those in Africa. As the number of North-South institutional collaborations with African institutional partners is growing exponentially, this should provoke further examination of the approaches to partnerships on the African continent.

Our study had some limitations. We only assessed the published descriptions of programs and acknowledge that material on the program websites and specific requests from program directors might have provided more detailed descriptions of program activities. However, the purpose of this study was to determine how programs are presented in published literature because this is the first source of information to the public and to other programs interested in setting up similar partnerships. Therefore, evaluating published program descriptions on key principles of reciprocity remained the focus of the review. Secondly, the WEIGHT group guidelines were proposed for short-term exchange programs locally and internationally. They were not intended to address issues surrounding long-term (>1 year) global health service or by experts providing technical assistance [58].

The WEIGHT guidelines were, by the WEIGHT's own account, created with limited evidence to inform the development process, and a significant obstacle to generating such supporting evidence is the difficulty in measuring the performance of training programs [58]. However, they have gained wide acceptance from the global health community and are consistent with guidelines from other groups such as the American Academy of Pediatrics (AAP) Consensus guidelines for International Child Health (ICH) Electives and The Federation of Pediatric Organizations (FOPO) Global Health Working Group. The AAP consensus guidelines for ICH electives mandate cross-cultural awareness training and faculty preceptorship in the host country, and FOPO has called for residency programs to respect the rights, autonomy, and confidentiality of patients and families in clinical care, research, and operational programs [59].

We therefore propose that programs be encouraged to describe their partnerships using key ethical elements of reciprocity and that a set of standards be applied to articles on global health programs that are being considered for publication.

- (1) Stated program goals of both partners or existence of a memorandum of understanding between partner institutions.
- (2) Statement of local needs and priorities that guide program activities.
- (3) Assurance that trainee activities correspond to level of training and indication of supervision.

- (4) Consideration of costs and benefits to the host.
- (5) Training in appropriate language skills relevant to the host's locale as well as sociocultural, political, and historical aspects of host community.
- (6) Adherence to host country licensing standards, visa policies, research ethics review, training on privacy and security of patient information.
- (7) Ethics committee approval for research and appropriate training in international research ethics.
- (8) Adherence to international standards for authorship of publications with input for host faculty and if possible collaborative authorship.

As proposed by the WEIGHT group, it is anticipated that these principles will fulfill the requirement that partnerships must be ethical. Further evaluation of the degree to which these principles predict the productivity and durability of partnerships is needed.

#### 5. Conclusion

Authors are constrained to describe the most important components of their programs within the limited space allotted to published reports. This has forced emphasis on program curricula and evaluation over the elements that lead to ethical and sustainable partnerships. Although some recently published articles show evidence of reciprocity with a trend to increasing identification of local needs and collaborative authorship, many do not. Of additional concern are the lower reciprocity scores of partnerships formed between North and South institutions in Africa compared to Asia and S. America. Young partnerships must be established not only with good intentions, but also on ethical principles. We recommend that the eight key principles of reciprocity described in this paper be used as a minimum set of standards for published program descriptions to encourage institutions entering new global health partnerships to take a more ethical and sustainable approach to partnering.

#### References

- O. Olakanmi and P. A. Perry, "Medical volunteerism in Africa: an historical sketch," *Virtual Mentor*, vol. 8, no. 12, pp. 863–870, 2006.
- [2] C. Fluehr-Lobban, "Globalization of research and international standards of ethics in anthropology," *Annals of the New York Academy of Sciences*, vol. 925, pp. 37–44, 2000.
- [3] A. D. Pinto and R. E. G. Upshur, "Global health ethics for students," *The Lancet*, vol. 358, pp. 1539–1542, 2001.
- [4] M. Bernstein, "Ethical dilemmas encountered while operating and teaching in a developing country," *Canadian Journal of Surgery*, vol. 47, no. 3, pp. 170–172, 2004.
- [5] R. M. Einterz, C. R. Kelley, J. J. Mamlin, and D. E. Van Reken, "Partnerships in international health. The Indiana University-Moi University experience," *Infectious Disease Clinics of North America*, vol. 9, no. 2, pp. 453–455, 1995.
- [6] A. Chiverton, "Ethics of international medical electives in the developing world: helping those in need or helping ourselves?" *Bioethics*, p. 46, 2009.

- [7] C. J. Conard, M. J. Kahn, K. B. DeSalvo, and L. L. Hamm, "Student clinical experiences in Africa: who are we helping?" Virtual Mentor, vol. 8, no. 12, pp. 855–858, 2006.
- [8] J. A. Crump and J. Sugarman, "Ethical considerations for short-term experiences by trainees in global health," *Journal of* the American Medical Association, vol. 300, no. 12, pp. 1456– 1458, 2008.
- [9] F. Hamadani, L. Sacirgic, and A. McCarthy, "Ethics in global health: the need for evidence-based curricula," *McGill Journal of Medicine*, vol. 12, no. 2, article 120, 2009.
- [10] P. James Imperato, "A third world international health elective for U.S. medical students: the 25-year experience of the State University of New York, Downstate Medical Center," *Journal of Community Health*, vol. 29, no. 5, pp. 337–373, 2004.
- [11] AAMC, Medical School Graduation Questionnaire: All Schools Report, Association of American Medical Colleges, Washington, DC, USA, 1984.
- [12] AAMC, Medical School Graduation Questionnaire: All Schools Report, Association of American Medical Colleges, Washington, DC, USA, 2010.
- [13] D. Clay Ackerly, K. Udayakumar, R. Taber, M. H. Merson, and V. J. Dzau, "Perspective: global medicine: opportunities and challenges for academic health science systems," *Academic Medicine*, vol. 86, no. 9, pp. 1093–1099, 2011.
- [14] C. O. Airhihenbuwa, O. Shisana, N. Zungu et al., "Research capacity building: a US-South African partnership," *Global Health Promotion*, vol. 18, no. 2, pp. 27–35, 2011.
- [15] N. Anandaraja, S. Hahn, N. Hennig, R. Murphy, and J. Ripp, "The design and implementation of a multidisciplinary global health residency track at the Mount Sinai School of Medicine," *Academic Medicine*, vol. 83, no. 10, pp. 924–928, 2008.
- [16] T. A. Bauer and J. Sanders, "Needs assessment of Wisconsin primary care residents and faculty regarding interest in global health training," *BMC Medical Education*, vol. 9, no. 1, article 36, 2009.
- [17] G. Gordon, E. Vongvichit, V. Hansana, and K. Torjesen, "A model for improving physician performance in developing countries: a three-year postgraduate training program in Laos," *Academic Medicine*, vol. 81, no. 4, pp. 399–404, 2006.
- [18] S. G. Federico, P. A. Zachar, C. M. Oravec, T. Mandler, E. Goldson, and J. Brown, "A successful international child health elective: the University of Colorado Department of Pediatrics' experience," *Archives of Pediatrics and Adolescent Medicine*, vol. 160, no. 2, pp. 191–196, 2006.
- [19] A. R. Gupta, C. K. Wells, R. I. Horwitz, F. J. Bia, and M. Barry, "The International Health Program: the fifteen-year experience with Yale University's Internal Medicine Residency Program," *American Journal of Tropical Medicine and Hygiene*, vol. 61, no. 6, pp. 1019–1023, 1999.
- [20] W. C. Miller, G. R. Corey, G. J. Lallinger, and D. T. Durack, "International health and internal medicine residency training: the Duke University experience," *American Journal of Medicine*, vol. 99, no. 3, pp. 291–297, 1995.
- [21] B. Oettgen, A. Harahsheh, S. Suresh, and D. Kamat, "Evaluation of a global health training program for pediatric residents," *Clinical Pediatrics*, vol. 47, no. 8, pp. 784–790, 2008.
- [22] R. E. Pust and S. P. Moher, "A core curriculum for international health: evaluating ten years' experience at the University of Arizona," *Academic Medicine*, vol. 67, no. 2, pp. 90–94, 1992.
- [23] A. P. Sawatsky, D. J. Rosenman, S. P. Merry, and F. S. McDonald, "Eight years of the mayo international health program: what an international elective adds to resident education," *Mayo Clinic Proceedings*, vol. 85, no. 8, pp. 734–741, 2010.

- [24] M. Godkin and J. Savageau, "The effect of medical students' international experiences on attitudes toward serving underserved multicultural populations," *Family Medicine*, vol. 35, no. 3, pp. 273–278, 2003.
- [25] G. Smilkstein and D. Culjat, "An international health fellowship in primary care in the developing world," *Academic Medicine*, vol. 65, no. 12, p. 781, 1990.
- [26] K. Ahrens, F. B. Stapleton, and M. Batra, "The University of Washington Pediatric Residency Program Experience in Global Health and Community Health and Advocacy," *Virtual Mentor*, vol. 12, no. 3, pp. 184–189, 2010.
- [27] L. P. Babich, W. J. Bicknell, L. Culpepper, and B. W. Jack, "Social responsibility, international development, and institutional commitment: lessons from the Boston University experience," *Academic Medicine*, vol. 83, no. 2, pp. 143–147, 2008.
- [28] W. H. Curioso, S. Fuller, P. J. Garcia, K. K. Holmes, and A. M. Kimball, "Ten years of international collaboration in biomedical informatics and beyond: the AMAUTA program in Peru," *Journal of the American Medical Informatics Association*, vol. 17, no. 4, pp. 477–480, 2010.
- [29] D. Ozgediz, J. Wang, S. Jayaraman et al., "Surgical training and global health: initial results of a 5-year partnership with a surgical training program in a low-income country," *Archives of Surgery*, vol. 143, no. 9, pp. 860–865, 2008.
- [30] H. P. Scarlett, R. A. Nisbett, J. Stoler et al., "South-to-north, cross-disciplinary training in global health practice: ten years of lessons learned from an infectious disease field course in Jamaica," *The American Journal of Tropical Medicine and Hygiene*, vol. 85, no. 3, pp. 397–404, 2011.
- [31] S. H. Vermund, V. V. Sahasrabuddhe, S. Khedkar et al., "Building global health through a center-without-walls: the Vanderbilt Institute for Global Health," *Academic Medicine*, vol. 83, no. 2, pp. 154–164, 2008.
- [32] A. Chin-Quee, L. White, I. Leeds, J. Macleod, and V. A. Master, "Medical student surgery elective in rural Haiti: a novel approach to satisfying clerkship requirements while providing surgical care to an underserved population," World Journal of Surgery, vol. 35, no. 4, pp. 739–744, 2011.
- [33] D. O. Freedman, E. Gotuzzo, C. Seas et al., "Educational programs to enhance medical expertise in tropical diseases: the Gorgas Course experience 1996 2001," *American Journal of Tropical Medicine and Hygiene*, vol. 66, no. 5, pp. 526–532, 2002.
- [34] C. Z. Margolis, R. J. Deckelbaum, Y. Henkin, S. Baram, P. Cooper, and M. L. Alkan, "A medical school for international health run by international partners," *Academic Medicine*, vol. 79, no. 8, pp. 744–751, 2004.
- [35] W. H. Waddell, P. R. Kelley, E. Suter, and E. J. Levit, "Effectiveness of an international health elective as measured by NBME Part II," *Journal of Medical Education*, vol. 51, no. 6, pp. 468–472, 1976.
- [36] N. Vora, M. Chang, H. Pandya, A. Hasham, and C. Lazarus, "A student-initiated and student-facilitated international health elective for preclinical medical students," *Medical Education Online*, vol. 15, 2010.
- [37] D. D. Klaristenfeld, M. Chupp, W. G. Cioffi, and R. E. White, "An international volunteer program for general surgery residents at Brown Medical School: the Tenwek Hospital Africa Experience," *Journal of the American College of Surgeons*, vol. 207, no. 1, pp. 125–128, 2008.
- [38] J. P. Fader and S. W. Wolk, "Training general surgeons to practice in developing world nations and rural areas of the

- United States-one residency program's model," *Journal of Surgical Education*, vol. 66, no. 4, pp. 225–227, 2009.
- [39] J. S. Qureshi, J. Samuel, C. Lee, B. Cairns, C. Shores, and A. G. Charles, "Surgery and global public health: the UNC-Malawi surgical initiative as a model for sustainable collaboration," *World Journal of Surgery*, vol. 35, no. 1, pp. 17–21, 2011.
- [40] A. J. Hayanga, "Volunteerism in general surgical residency: fostering sustainable global academic partnerships," *Archives of Surgery*, vol. 142, no. 6, pp. 577–579, 2007.
- [41] A. M. Harvey, "The Cayetano Heredia (Lima) exchange program," *The Johns Hopkins Medical Journal*, vol. 139, pp. 14–24, 1976
- [42] I. L. Leeds, F. X. Creighton, M. A. Wheatley et al., "Intensive medical student involvement in short-term surgical trips provides safe and effective patient care: a case review," BMC Research Notes, vol. 4, no. 1, article 317, 2011.
- [43] D. Silverberg, R. Wellner, S. Arora et al., "Establishing an international training program for surgical residents," *Journal of Surgical Education*, vol. 64, no. 3, pp. 143–149, 2007.
- [44] J. J. Miranda, J. S. Yudkin, and C. Willott, "International Health Electives: four years of experience," *Travel Medicine and Infectious Disease*, vol. 3, no. 3, pp. 133–141, 2005.
- [45] S. Niemantsverdriet, G. D. Majoor, C. P. M. Van Der Vleuten, and A. J. J. A. Scherpbier, "I found myself to be a down to earth Dutch girl': a qualitative study into learning outcomes from international traineeships," *Medical Education*, vol. 38, no. 7, pp. 749–757, 2004.
- [46] D. Sanders, F. Oppong, and A. Kingsnorth, "Opportunities for surgical trainees: project hernia in Ghana," *Clinical Teacher*, vol. 5, no. 1, pp. 33–35, 2008.
- [47] A. J. Daly and M. C. Barker, "Australian and New Zealand university students' participation in international exchange programs," *Journal of Studies in International Education*, vol. 9, no. 1, pp. 26–41, 2005.
- [48] H. Nishigori, T. Otani, S. Plint, M. Uchino, and N. Ban, "I came, i saw, i reflected: a qualitative study into learning outcomes of international electives for Japanese and British medical students," *Medical Teacher*, vol. 31, no. 5, pp. e196–e201, 2009
- [49] J. Fraser, D. Briggs, and P. Taytiwat, "A Thai-Australian rural health service management and medical education study tour: workplace changes after a year," *Asia Pacific Journal of Health Management*, vol. 3, no. 1, pp. 33–39, 2008.
- [50] M. A. Godkin, J. A. Savageau, and K. E. Fletcher, "Effect of a global longitudinal pathway on medical students' attitudes toward the medically indigent," *Teaching and Learning in Medicine*, vol. 18, no. 3, pp. 226–232, 2006.
- [51] C. Haq, D. Rothenberg, C. Gjerde et al., "New world views: preparing physicians in training for global health work," *Family Medicine*, vol. 32, no. 8, pp. 566–572, 2000.
- [52] R. Pust, B. Dahlman, B. Khwa-Otsyula, J. Armstrong, and R. Downing, "Partnerships creating postgraduate family medicine in Kenya," *Family Medicine*, vol. 38, no. 9, pp. 661– 666, 2006.
- [53] J. J. Fins and P. Rodríguez Del Pozo, "The hidden and implicit curricula in cultural context: new insights from Doha and New York," *Academic Medicine*, vol. 86, no. 3, pp. 321–325, 2011.
- [54] H. S. F. Fraser, P. Biondich, D. Moodley, S. Choi, B. W. Mamlin, and P. Szolovits, "Implementing electronic medical record systems in developing countries," *Informatics in Primary Care*, vol. 13, no. 2, pp. 83–95, 2005.
- [55] M. E. Goecke, J. Kanashiro, P. Kyamanywa, and G. L. Hollaar, "Using CanMEDS to guide international health electives: an enriching experience in Uganda defined for a Canadian

- surgery resident," Canadian Journal of Surgery, vol. 51, no. 4, pp. 289–295, 2008.
- [56] L. Hanson, S. Harms, and K. Plamondon, "Undergraduate international medical electives: some ethical and pedagogical considerations," *Journal of Studies in International Education*, vol. 15, no. 2, pp. 171–185, 2011.
- [57] S. Shah and T. Wu, "The medical student global health experience: professionalism and ethical implications," *Journal of Medical Ethics*, vol. 34, no. 5, pp. 375–378, 2008.
- [58] J. A. Crump, J. Sugarman, M. Barry et al., "Ethics and best practice guidelines for training experiences in global health," *American Journal of Tropical Medicine and Hygiene*, vol. 83, no. 6, pp. 1178–1182, 2010.
- [59] K. Torjesen, A. Mandalakas, R. Kahn, and B. Duncan, "International child health electives for pediatric residents," *Archives of Pediatrics and Adolescent Medicine*, vol. 153, no. 12, pp. 1297–1302, 1999.

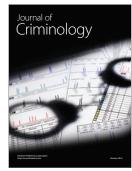
















Submit your manuscripts at http://www.hindawi.com

