Journal of Studies in International Education

http://jsi.sagepub.com/

Undergraduate International Medical Electives: Some Ethical and Pedagogical Considerations

Lori Hanson, Sheila Harms and Katrina Plamondon

Journal of Studies in International Education published online 7 April 2010
DOI: 10.1177/1028315310365542

The online version of this article can be found at:
http://jsi.sagepub.com/content/early/2010/03/26/1028315310365542

Published by:

http://www.sagepublications.com

On behalf of:

Association for Studies in International Education

Additional services and information for *Journal of Studies in International Education* can be found at:

Email Alerts: http://jsi.sagepub.com/cgi/alerts

Subscriptions: http://jsi.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

Journal of Studies in International Education OnlineFirst, published on April 7, 2010 as doi:10.1177/1028315310365542

Journal of Studies in International Education
XX(X) 1–15
© 2010 Nuffic
Reprints and permission: http://www.sagepub.com/journalsPermissions.nav
DOI: 10.1177/1028315310365542
http://jsie.sagepub.com

Undergraduate International Medical Electives: Some Ethical and Pedagogical Considerations

Lori Hanson[1], Sheila Harms[2], and Katrina Plamondon[3]

Abstract

The authors argue that attempts to establish more placements to meet the growing demands of undergraduate medical students in North America for international experiences may be outweighing critical reflection on the ethical issues, curricular content, and pedagogical strategies necessary to support equitable engagements with countries of the Global South. On the basis of a critical analysis of literature on international medical electives and experiences (IMEs), the article explores trends in IMEs and exposes several prominent issues, including paradoxes in underlying motivations, missing or ad hoc curricula and pedagogical approaches in IMEs, and ethical challenges that frequently arise. By engaging perspectives from critical educational theory, the authors suggest that IMEs as currently conceived are potentially ripe sites for the reproduction of colonialist ideas of North–South relationships. The authors conclude that IMEs will do little to address historically and politically rooted global health inequities unless critical consciousness is raised through improved global health curricula and appropriate pedagogical strategies.

Keywords

international medical electives, global health pedagogy, global health ethics, global health equity

[1]University of Saskatchewan, Saskatoon, Saskatchewan, Canada
[2]McMaster University, Hamilton, Ontario, Canada
[3]Mount Royal University, Calgary, Alberta, Canada

Corresponding Author:
Lori Hanson, Department of CH&E, University of Saskatchewan, Health Sciences Building, 107 Wiggins Road, Saskatoon, SK, S7N 5E5
E-mail: lori.hanson@usask.ca

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

Joe decided to go to South Africa for 4 weeks after his first year of medical school as a way to travel and experience medicine in a developing country context. A friend recommended he connect with a physician working in a high-intensity community hospital just outside of Johannesburg. Three quick e-mails later, Joe was on his way. His introduction to the hospital was through a picket line—health workers in the public system were on strike, and a state of crisis was welling across the country. Every morning, he politely greeted the striking workers as he crossed into the hospital grounds. He was never quite sure what the strike was about. Upon return, his presentation to fellow students was filled with photos of strange skin conditions, tales of performing surgical procedures for which he had no prior training, and sad stories of sick children whom he had befriended. He ended with great shots of his skydiving trip during his last week in the country. After the presentation, medical students gathered around, wanting to know how they, too, could participate in such an exciting medical elective.

Joe enjoyed his experience and the prestige awarded to him upon his return. After crossing a picket line for 20 days, however, why did Joe not know or consider what the strike was about? Joe's story echoes those of many students participating in medical electives in low- and middle-income countries (LMICs). His lack of insight into both the complexities of the strike and the ethical questions raised by performing surgical procedures without appropriate preparation reflect some of the critical gaps in preparing and supervising students participating in international medical electives[1] (IMEs).

Over the last several years, the urgency of increasing health inequities has come to the forefront of political spheres. In 2008, a landmark publication by the World Health Organization Commission on the Social Determinants of Health (CSDH) named poor public policy and unfair economics as direct contributors to global health inequities (World Health Organization [WHO], 2008). To "close the gap" on health inequities, the CSDH suggests collaborative actions that involve governments, civil societies, local communities, and international agencies (Baum, 2007; Irwin & Scali, 2007; WHO, 2008). One of three key action recommendations includes the development of a workforce trained in the social determinants of health (SDH).[2]

Our critical review of IMEs arises in this context of growing health disparities, of calls for action and education on the SDH, and of a growing demand of undergraduate medical students in North America to participate in IMEs in countries of the Global South. In this article, we offer an analytic discussion of ethical issues, curricular content, and pedagogical strategies related to IMEs in this context. We also offer a critical reflection on the potential for disparities in LMICs to provide a learning environment ripe for exploitive rather than reciprocal and ethical engagements by students from high-income countries (HICs). We challenge medical (and other health) educators to respond with the critical reflection, appropriate pedagogy, and intentionality necessary to support equitable engagements with countries of the Global South, rather than simply increasing the availability and accessibility of IMEs. Our discussion includes a critical review of the current scope and context of IMEs (as described in the current literature), followed by a discussion of ethical challenges that frequently surface. Alternative strategies for teaching and learning, including transformational pedagogy

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

and related curricula, are suggested as a possibility for addressing some of the ethical challenges presented by IMEs and for responding to the call for action on the SDH.

IMEs: Current Context, Scope, and Curricula

An initial review of the literature, using combinations of the terms *global health* and *international medical electives* in Medline, PubMed, and Google Scholar, yielded 33 published articles since 2000. In general, we found that studies attempting to evaluate IMEs are fraught with methodological limitations, including small samples, inappropriate study design for the research question being posed, lack of randomization or control groups, selection bias, and absence of validated outcome measures. Comparisons among the studies are also difficult, as no standard methods of evaluating programs, curriculum, or student outcomes emerge from the published sources. In one meta-analysis of IME studies, only eight studies were found to be comparable (Thompson, Huntington, Hunt, Pinsky, & Brodie, 2003). In terms of outcome measures utilized, we found a plethora of distinct study-specific surveys regarding attitudes toward working with underserviced populations, knowledge of public health and tropical diseases, and career choices as well as self-reported outcome measures of cultural sensitivity, cultural competency, and humanistic self-awareness (Godkin & Savageau, 2003; Jotkowitz et al., 2004; Smith & Weaver, 2006). The results from these surveys are thus difficult to compare and generalize. In spite of these methodological problems, identifiable trends and issues do appear that beg reflection and discussion.

Currently, no registry of students in Canada or United States exists that can accurately portray the numbers of students involved in IMEs. Published reviews, program evaluations, or commentaries are the only sources of data identifying and describing IMEs. Within this literature, there appears to be significant variability in content, duration, and pedagogy related to global health curriculum accompanying the IME or study abroad. It is clear, however, that in Canada there is a growing demand for increased opportunities in both IMEs and undergraduate medical curriculum in global health (Association of Faculties of Medicine of Canada [AFMC], 2007; Drain et at., 2007; Edwards, Piachaud, Rowson, & Miranda, 2004; Houpt, Pearson, & Hall, 2007; Ramchandani, 2007). A recent survey of Canadian medical schools reveals that all 17 medical schools have students participating in IMEs. Although 9 of these universities have mandatory global health lectures or modules, which vary from 2 to 22 hr, none have mandatory global health courses in their medical curriculum and less than one quarter of the schools offer mandatory predeparture programs (Izadnegahdar et al., 2008). There appear to be vast differences among the four existing predeparture programs, with wide variation in content, length, and language requisites. The survey also indicated that medical students organized and supported their own IMEs in 44% of the schools. Almost none of the universities identified opportunities for postplacement debriefing (Izadnegahdar et al., 2008).

Comparable trends appear across the medical schools of the United States, with growth in the popularity of IMEs, accompanied by variability and inconsistency in

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

curricular content and preparation (Drain et al., 2007; Houpt et al., 2007; McKinley, Williams, Norcini, & Anderson, 2008). According to Mutchnik, Moyer, and Stern (2003), in 1982, 6% of all U.S. medical students participated in IMEs, consisting of clinical rotations abroad. By 2002, this figure had risen to 38%. Drain et al., using the 2004 American Association of Medical College's (AAMC) Medical School Graduation Questionnaire, report different figures; however, they found a similar trend, with more than 22% of U.S. and Canadian medical school graduates participating in an international health elective in 2004, compared with 6% of 1984 graduates.

The published studies were similarly lacking in detail about curricula, preparation, and supervision in IMEs. Reference to the instructional pedagogy within the context of medical student education on global health and within the experience of IMEs is frequently absent. A few examples of predeparture or orientation sessions for American medical students appear fairly comprehensive in scope and duration (Smith & Weaver, 2006), and there are many examples in the United States that provide at least some indication that predeparture global health lectures are included. However, similar to the Canadian survey, mandatory global health courses are rarely included in core curriculum (Drain et al., 2007). Overall, it seems clear that in both countries the availability of global health courses and training for undergraduate medical students is incommensurate with the number of individuals who participate in IMEs (Drain et al., 2007; Houpt et al., 2007; Panosian & Coates, 2006; Shah & Wu, 2008).

Although exact content, duration, and intensity of instruction is not frequently stated, the global health curricula mentioned in the context of IMEs is largely biomedical in focus. Topics such as clinical skills development, including diagnostic acumen and participation in simple procedures, exposure to infectious diseases or other rare pathologies, and basic knowledge in tropical medicine, have been reported (Grudzen & Legome, 2007; McKinley et al., 2008; Pinto & Upshur, 2007; Smith & Weaver, 2006; Thompson et al., 2003). In contrast, the SDH were rarely mentioned in the reviewed studies except as an educational outcome of the IME experience (Drain et al., 2007; Edwards et al., 2004; Smith & Weaver, 2006; Thompson et al., 2003). Perhaps this curricular omission helps to explain why only a few references suggest or discuss the development of other roles, responsibilities, or skills (i.e., advocacy) that physicians might need to affect global health equity (British Medical Association International Development, 2007; Dickson & Dickson, 2005; Pinto & Upshur, 2007; Smith & Weaver, 2006). Moreover, despite the undisputable role of multinational and national development strategies and policies in generating global health inequities, none of the articles reviewed on IMEs mentioned content relating to concepts or theories of development or of health inequities.

Many of these concerns are common across a broad range of health-related fields, including nursing, dentistry, veterinary medicine, and social work. Critique of international electives within these areas similarly point out practices of "benevolent imperialism" (Razack, 2002) through the advancement of inequitable partnerships that ultimately serve to place nations of the Global South at even greater disadvantage. Within the field of social work, these engagements have been identified as relying

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

heavily on conjunctural analysis, which considers only the immediate social, political, and economic climate rather than on structural analysis, which considers historical processes within these spheres (Razack, 2002). Dickson and Dickson's commentary on dental volunteerism identifies Western approaches to dental care and reliance on its advanced technologies as being problematic in low resource settings, a critique that has also been attributed to nursing participant's overreliance on the biomedical model in their international placements (Leininger, 1998). Northern participants have also been identified as failing to value the expertise and knowledge base of experts from developing nations in such exchanges, a common critique of international electives in many fields (Dickson & Dickson, 2005; Leininger, 1998; Midgley, 1990). In such cases, Southern faculty participants have often faced uncomfortable and tense cultural impositions by Northern participants (Leininger, 1998). Such lapses are precipitated by curricula in these fields that do not adequately prepare students for the international setting and that are inconsistent across all schools (Bentley & Ellison, 2007; Wagner & Brown, 2002).

In many ways, the curricular and pedagogical gaps and omissions identified in relation to IMEs reflect the wider critique associated with educational efforts in global health and development studies that, as noted elsewhere, include inadequate attention to historical relationships of power, to critical perspectives on development, and to global health and development ethics (Epprecht, 2004; Farmer, 2005; Hanson, 2008; Inhorn & Janes, 2007; Pinto & Upshur, 2007), as well as the short duration of immersions, lack of faculty-led orientation, and integrative sessions, and absence of self-reflective practices (Dickson & Dickson, 2005; Grusky, 2000; Hanson, 2008; Smith & Weaver, 2006). Although it is difficult to decipher whether all students who attend IMEs are represented in this critique, it should come as no surprise that in 2004, 43% of respondents to the AAMC's Medical School Graduation Questionnaire rated their instruction in global health issues in the medical school curriculum as "inadequate" (McKinley et al., 2008).

These issues have not gone unrecognized. Noting that undergraduate medical education is insufficient for preparing health professionals for the practical and ethical challenges faced in global health study, including IMEs, many individuals and organizations have become involved in attempts to increase and improve the curricular content in global health. The AFMC global health resource group, for example, is one of the organizations that proposes integrated global health topics in six general competency domains across core curricula in both preclinical and clinical years (AFMC Report). Likewise, Drain et al. (2007) and Houpt and colleagues (2007) proposed specific suggestions for improving global health competencies through integration of global health content across the medical curricula. Shah and Wu (2008) in turn cite a number of American medical schools that are dedicating resources to the creation of elective courses, academic tracks, and residency programs for the study of global health and the alleviation of health disparities. However, all authors concur with our general conclusion that such opportunities are falling far short of the demand and that organized curricula associated with IMEs widely vary.

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

IMEs: Ethical Challenges

IMEs raise multiple ethical challenges for local LMICs and communities, students, host institutions, and HIC sending institutions (Crump & Sugarman, 2008; Pinto & Upshur, 2007; Shah & Wu, 2008). Our review suggests that many challenges stem from the pursuit of IMEs for motivations other than that of intentionally addressing global health inequities and from an historical legacy of nonreciprocal North–South engagements. Three interrelated motivations appear to drive most student and institutional involvement in IMEs: altruism, self-serving rationale (e.g., language development, curiosity, adventure, meeting population health needs of HICs), and the allure of the opportunity for medical practice outside the scope medical students would experience in their own settings.

The first motivation is perhaps the most widely cited and best understood. The second and third types of motivations were identified through an assessment of the nature of the indicators used to mark successful initiatives and the implicit messages that accompany many project descriptions. For example, in a number of the studies, markers of success included students' language acquisition, influence on their eventual choice of practice in underserviced areas, and on their learned ability to practice with greater frugality (Gupta, Wells, Horwitz, Bia, & Barry, 1999; Niemantsverdriet, van derVleuten, Majoor, & Scherpbier, 2005; Suchdev et al., 2007; Thompson et al., 2003). In addition, various program descriptions cited IMEs as opportunities for exposure to a wider range of illnesses, rare clinical experiences, or access to "high-volume" practical experiences with few institutional or administrative obstacles (Federico et al., 2006; Goecke, Kanashiro, Kyamanywa, & Hollaar, 2008; McKinley et al., 2008). For example, one program describes the success of an international child health elective by documenting the diversity of diagnoses observed (Federico et al., 2006). In another program, the authors cite exposure to cases never previously seen or never observed in such an advanced state of progression as ". . . evidence of enhanced clinical experience. . ." (Grudzen & Legome, 2007).

Overall, the success indicators and the program descriptions reflect overall benefits to the students and health systems in the home country and, in turn, appear to become primary motivations for student and institutional involvement in IMEs (Drain et al., 2007; Federico et al., 2006; Godkin & Savageau, 2003; Gupta et al., 1999; Jotkowitz et al., 2004; McKinley et al., 2008; Niemantsverdriet et al., 2005; Ramchandani, 2007; Smith & Weaver, 2006; Suchdev et al., 2007; Thompson et al., 2003).

Combined with curricular and pedagogical gaps outlined earlier, such motivations can foster unintended and unethical outcomes (Crump & Sugarman, 2008; Edwards et al., 2004). In the following anecdote, Shah and Wu (2008) illustrate the potential effects of these gaps:

> After finishing my first year of medical school, I participated in a mission trip to Mexico. Before flying to Mexico, I was not given any cultural, medical, or other training, nor could I speak Spanish. Upon arriving, I was assigned to a clinic

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

> where there were hundreds of patients but only one physician. I remember vividly seeing a frail 11-year old boy with polyuria, polydipsia and nocturia. My lack of medical training limited my differential. . . . I told him to limit caffeine intake . . . thinking back, he could have had a urinary tract infection, any number of renal abnormalities, or worse, I sent him out without ruling out diabetic ketoacidosis. And while I was seeing patients by myself, other first year medical students were performing surgeries in the other clinics and later bragging about it. (p. 376)

As reflected in this vignette, and as mentioned in various studies, IMEs can and do result in the serious ethical breech of practicing beyond one's competency (Banatvala & Doyal, 1998; Crump & Sugarman, 2008; Edwards et al., 2004).

IMEs are also immersed in complex layers of ethical challenges that stem from the persistent political legacy of unequal North–South relationships generally and the historical patterns of paternalistic medical engagements specifically.[3] Based on more than 20 years experience in Mozambique, Dickson and Dickson (2005) offer a valuable reflection on some of the exploitive dangers of that legacy as seen in medical or dental "volunteerism." Drawing attention to the glorification of "aid" or "development work," they argue that we need to encourage idealism, but "debate provocative questions that examine both our intentions and our roles" (p. 870). They recognize the potential of short-term outreach programs to become both self-serving and ineffective, falsely raising expectations in the host country. In addition, they suggest that such placements can impose burdens on local human and systems capacity, be an impediment to continuity and access to care, and be detrimental to achieving equity and sustainability in LMICs. Their reflection highlights the issue of reciprocity or the "mutual exchange of advantages" (*Canadian Oxford Dictionary*, 2000) and related concepts of mutuality, partnership, and exchange, which, in spite of their clear relevance, are seldom mentioned in the IMEs literature.

Our review suggests that the majority of studies reporting impacts or outcomes of IMEs both reflect and reinforce nonreciprocal arrangements. One of the mechanisms by which this happens is through one-sided success indicators. As previously noted, many studies report enhanced language and clinical diagnostic skills, increased interest in working with underserved populations (e.g. immigrant populations) or in primary care within the students' home countries (Drain et al., 2007; Federico et al., 2006; Godkin & Savageau, 2003; Grudzen & Legome, 2007; Gupta el al., 1999; Jotkowitz et al., 2004; McKinley et al., 2008; Ramsey, Haq, Gjerde, & Rothengerg, 2004; Shimahara, 2006; Smith & Weaver, 2006; Thompson et al., 2003), as well as enhanced knowledge of clinical international health issues such as tropical medicine, travel medicine, or global public health (Haq et al., 2000; Jotkowitz et al., 2004; Smith & Weaver, 2006; Thompson et al., 2003). Although enhanced knowledge and interest in primary care are undoubtedly positive outcomes of IMEs, they are exclusively focused on benefits to *sending* institutions and countries of the Global North. In the few cases that outcomes for host populations are mentioned, such as the study

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

by Mutchnick and colleagues (2003), these outcomes primarily revolve around having received supplies or donations from the visiting students and staff (Cohen, 1988; Korthius, Nekhlyudov, Ziganshin, Sadigh, & Green, 2002). Conclusions from the meta-analysis conducted by Thompson and colleagues (2003) suggest why additional outcomes are missing in the literature and highlight a rather nonchalant acceptance of the lack of reciprocity:

> We did not attempt to review the effects of the [IMEs] on patients or their communities in the host countries. Indeed, none of the studies we identified measured or reported any such beneficial or deleterious effects. It is noteworthy that the flow of students seeking short-term electives is largely unidirectional from developed to less developed countries, which may be putting added strain on the medical training facilities in developing countries. (p. 346)

We have illustrated that IMEs are growing in popularity among medical students but suggest that simply promoting their expansion on the basis of current models is an insufficient response fraught with ethical, curricular, and pedagogical gaps and problems. Indeed, that students can practice on patients of the Global South beyond their competency levels and "brag about it" (Shah & Wu, 2008), that supervision can appear almost superfluous, that institutions disregard the perspectives of and impacts on their Southern hosts, and that critical reflection on the historical and sociopolitical roots of inequality and ill-health appear either absent or disregarded in the curricula are highly problematic issues. Furthermore, that those issues exist while self-serving rationales couched in a "politics of virtue" persist, both reflects and perpetuates thoughts and attitudes of cultural and professional superiority (Edwards et al., 2004; Grusky, 2000; Hall, 2006; Pinto & Upshur, 2007; Shah & Wu, 2008) that can accentuate and essentialize cultural differences (Grusky, 2000; Morris, 2000) and legitimize double standards (Banatvala & Doyal, 1998; Edwards et al., 2004; Shah & Wu, 2008). Our review and reflections suggest that, as currently conceptualized, IMEs risk exploiting already resource-scarce settings and reinforcing the paternalistic ideas that underlie neocolonialist development practice (Dickson & Dickson, 2005; Grusky, 2000; Morris, 2000). Clearly a different model is needed.

Alternatives: Toward a Pedagogy of Global Health Transformation

In spite of the promising proposals for change to global health education noted earlier, currently, only a small proportion of IMEs take place within comprehensive global health training programs (McKinley et al., 2008; Shah & Wu, 2008). More often, the global health curricula associated with IMEs is missing, haphazard, or narrow in focus. Given that reality, is it any wonder that students—in the case of Canada at least 44% of them—continue to invent their own ways to engage? As Pinto and Upshur (2007) proposed, the responsibility for creating ethical and equitable engagements in

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

IMEs needs to shift from ill-prepared students who "face ethical dilemmas in global health" to the teachers and institutions who "have a responsibility to provide such training" (p. 2). Doing this responsibly involves thinking beyond the confines of an instrumental model of biomedical education, which is designed to teach clinical skills in familiar settings. For, as they further assert, much remains to be done on "larger questions of development . . . and what it means to be a citizen in an increasingly interdependent world, including a renewed idea of solidarity and a deeper insight into complex systems" (p. 10). Ethical and equitable IMEs require a context of long-term reciprocal relationships and an accompanying global health curricula that goes beyond biomedical content to include and encourage awareness of the SDH inequities and development of the skills needed to address them before, during, and after the international experience. Such changes, in turn, need pedagogical approaches that are designed to foster such skills, along with self-awareness, epistemic humility, and the capacity to critically analyze and challenge the institutional and structural inequalities embodied in Western models of development and medicine.

What exactly is transpiring in the teaching related to global health and to IMEs remains rather obscure. Yet it is the act of teaching that provides methods for self- and critical reflection on the clinical experience that can encourage students to question the social inequities that contextually frame those experiences, thus converting the IME experience into more transformative learning. To offer a way forward, we propose that the approaches offered by critical and transformative pedagogies[4] would serve well to intentionally foment the critical consciousness and provoke the kinds of social transformations so direly needed for improving global health.

Critical and transformative pedagogies all derive from a simple proposition—education is never neutral (Arnold, Burke, James, Martin, & Thomas, 1991; Freire, 1970; hooks, 1994; Mezirow, 1997; O'Sullivan, Morrell, & O'Connor, 2007; Shor & Freire, 1986). Accordingly, they pose that education can be domesticating and instrumental, or it can be emancipatory. By implication, the teacher either engages students in the reproduction of the status quo or encourages the questioning, challenging, and ultimately, transformation of it (Freire, 1970; Shor & Freire, 1986). Critical educational theories suggest that when educators do not encourage students to question and to challenge the exercise of unjust power, they enable the students to accept it, adapt to it, and engage in its reproduction (Freire, 1970; hooks, 1994; Shor & Freire, 1986).

Critical pedagogies in fact do underlie various current examples of medical student service-learning programs in local communities and a few noteworthy programs with integrated local and global elements that deliberately include opportunities to engage students with local communities in actions on the SDH. One such program at the University of Saskatchewan entitled "Making the Links" provides an opportunity for undergraduate medical students to participate in a local interprofessional student-led inner-city clinic, a Northern Aboriginal community health initiative and a long-standing service-learning project in Mozambique over the course of 2 years, with each element highlighting SDH as well as clinical curriculum and each providing guided and facilitated reflections. Students complement the experiential aspects by enrolling in a

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

comprehensive global health course and by taking language courses (University of Saskatchewan, 2010). Even more subtle changes to medical curricula suggest educators are beginning to take note of content proposed by many national and international organizations that makes use of the ample evidence regarding SDH and health inequities emerging from critical epidemiological studies and from community and public health fields (Braveman, 2001; Braveman, Krieger, & Lynch, 2000; Krieger, 2001). Furthermore, national organizations such as the AFMC have carried out extensive national consultations that have led to the identification of the necessary global health competencies. For the AFMC global health resource group, those competencies lie within six interrelated classifications in which students require either basic or advanced knowledge depending on their (intended) site of practice. The six knowledge domains include global burden of disease, health implications of migration, travel and displacement, social and environmental determinants of health, globalization and health, healthcare in low-resource settings, and health as a human right and development resource (AFMC, 2007). Overall, it seems many curricular elements, carefully constructed competency domains, and at least a few pedagogical examples are in place to begin to consider IMEs within integrated global health curricula. What appears to be missing is their broad application as a requirement in medical training and the practice of medical education beyond clinical settings.

Our analysis suggests that there are significant deficiencies in the articulation of pedagogies and curricula that support the development of competencies outside of the medical domain of practice. To promote a broad understanding of the SDH and their relationship to health inequalities, curricula need to facilitate understanding of upstream forces influencing health, to encourage awareness of the impact of social and political inequities on the health status of disadvantaged populations, and to do so while simultaneously fostering the development of skills and strategies for ameliorating them—few of which are located in the clinical domain. Accordingly, global health teaching should include not only clinical placements such as currently conceptualized IMEs but also the provision of opportunities to participate meaningfully in civil society actions for change, be they local or global. In addition, teaching for global health equity needs to incorporate and model humility, reflexivity, and reflective practice. Such changes will require that global health educators locate curricular content and pedagogical approaches that enable transformation through personal reflection, critical analysis of contextual issues, and theoretically informed actions or praxis.

We recognize many barriers to the implementation of such ideas. Preparing students to engage ethically in IMEs demands the use of critical perspectives committed to exposing, deconstructing, and countering cultural and ideological legacies of colonialism and imperialism (Gandhi, 1998), which we consider to be a historical root of global health inequity. A critical pedagogical approach could challenge the very premise of medicine by opening up opportunities for students to question the values, assumptions, and epistemologies that underlie and legitimatize it as currently practiced. Still, it is precisely such approaches that could enable dialogue to surface regarding the place of global health education in general, and IMEs in particular, in fostering the professional and *civil* capacities necessary to address global health inequity.

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

Conclusion

The current ad hoc approach that characterizes the majority of IMEs examined in this article indicates that though benefits to students and their future patient base in the Global North are clearly made possible through the experiential aspects of IMEs, peoples of the Global South remain recipients rather than active agents in IME programs. By not openly critiquing the colonial legacy underlying the practice of IMEs, we encourage students to absolve civic responsibility of responding to global health inequities. Without intentional efforts to engage critical and transformative pedagogies, we reduce opportunities for students to understand and engage local agency and diminish the importance and possibility of reciprocity. We conclude that the current situation and growth of IMEs will do little to address historically and politically rooted global health inequities, unless critical consciousness is raised through improved and expanded global health curricula and appropriate pedagogical strategies. The required elements of such a strategy exist. Our critique and suggestions provide a starting place for educators to engage these elements systematically into a comprehensive global health program of study within which deliberate attention is paid to the call for action on the social determinants of health (SDH) prior to and in accompaniment of clinical experiences. The use of transformative pedagogies in such a program would go far in encouraging students to take their rightful place in acting on social inequities in health.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

Financial Disclosure/Funding

The authors received no financial support for the research and/or authorship of this article.

Notes

1. In the literature, the terms *international health electives*, *international medical electives*, and *international health experiences* or *exchanges* are used interchangeably to include both formal and informal extracurricular experiences of undergraduate medical students in countries other than their own. For purposes of simplification and delimitation, we use the term *IMEs* and in the article assess only IMEs in countries of the Global South. Furthermore, we distinguish between these experiences and the international health or more commonly *global health* seminars, courses, or other curricula that (sometimes) precede or accompany them.
2. Presented as the final report of the Commission on Social Determinants of Health, *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health* presents the most comprehensive and compelling evidence to date on SDH and global health inequities (Commission on the Social Determinants of Health, WHO, 2008).
3. The statement refers in part to the historical legacy of tropical medicine and its lingering influence on IMEs and global health more broadly. Various authors have considered the colonialist imperative that drove the creation of tropical medicine, with its concurrent

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

preoccupation with the production of doctors for colonial service through European schools and institutes (Arnold, 1988; Gibson, 2009; King, 2002; "Tropical Medicine," 2004).

4. Many pedagogical traditions, loosely known as critical educational theories, provide pathways and tools for such "praxis." Some examples include service learning, experiential learning, and transformative or perspective learning (Grusky, 2000; hooks, 1994; Mezirow, 1997; O'Sullivan et al., 2002).

References

Association of Faculties of Medicine of Canada. (2007). *Creating global health curricula for Canadian medical students* (Report of the AFMC Resource Group on Global Health). Retrieved November 15, 2008, from, http://www.afmc.ca/pdf/pdf_2007_global_health_report.pdf

Arnold, D. (1988). Introduction: Disease, medicine and empire. In D. Arnold (Ed.), *Imperial medicine and indigenous societies* (pp. 1-26). New York: Manchester University Press.

Arnold, R., Burke, B., James, C., Martin, D., & Thomas, B. (1991). *Educating for a change*. Toronto, Ontario, Canada: Between the Lines.

Banatvala, N., & Doyal, L. (1998). Knowing when to say "no" on the student elective: Students going on electives abroad need clinical guidelines. *British Medical Journal, 316*, 1404-1405.

Baum, F. (2007). Cracking the nut of health equity: Top down and bottom up pressure for action on the social determinants of health. *Promotion & Education, 14*(2), 90-95.

Bentley, R., & Ellison, K. J. (2007). Increasing cultural competence in nursing through international service-learning experiences. *Nurse Educator, 32*, 207-211.

Braveman, P. (2001). Epidemiology and (neo-)colonialism. *Journal of Epidemiology and Community Health, 55*, 160-161.

Braveman, P., Krieger, N., & Lynch, J. (2000). Health inequalities and social inequalities in health. *Bulletin of the World Health Organization, 78*, 232-234.

British Medical Association International Department. (2007). *Improving health for the world's poor: What can health professionals do?* London: British Medical Association.

Canadian Oxford Dictionary. (2000). Canada: Oxford University Press.

Cohen, I. (1988). A community medicine program in Jamaica for fourth-year medical students. *Journal of the Louisiana State Medical Society, 140*, 41-47.

Crump, J. A., & Sugarman, J. (2008). Ethical considerations for short-term experiences by trainees in global health. *Journal of the American Medical Association, 300*, 1456-1458.

Dickson, M., & Dickson, G. (2005). Volunteering: Beyond an act of charity. *Journal of Canadian Dentistry Association, 71*, 865-869.

Drain, P. K., Primack, A., Hunt, D. D., Fawzi, W. W., Holmes, K. K., & Gardner, P. (2007). Global health in medical education: A call for more training and opportunities. *Academic Medicine, 82*, 226-230.

Edwards, R., Piachaud, J., Rowson, M., & Miranda, J. (2004). Understanding global health issues: Are international medical electives the answer? *Medical Education, 38*, 688-690.

Epprecht, M. (2004). Work/study abroad courses in international development studies: Some ethical and pedagogical issues. *Canadian Journal of Development Studies, 25*, 709-728.

Farmer, P. (2005). *Pathologies of power: Health, human rights, and the new war on the poor*. Berkeley: University of California Press.

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

Federico, S. G., Zachar, P. A., Oravec, C. M., Mandler, T., Goldson, E., & Brown, J. (2006). A successful international child health elective: The University of Colorado department of pediatrics' experience. *Archives of Pediatrics and Adolescent Medicine, 160*, 191-196.

Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.

Gandhi, L. (1998). *Postcolonial theory: A critical introduction*. New York: Columbia University Press.

Gibson, A. (2009). Miasma revisited: The intellectual history of tropical medicine. *Australian Family Physician, 38*(1-2), 57-59.

Godkin, M., & Savageau, J. (2003). The effect of medical students' international experiences on attitudes toward serving underserved multicultural populations. *Family Medicine, 35*, 273-278.

Goecke, M. E., Kanashiro, J., Kyamanywa, P., & Hollaar, G. L. (2008). Using CanMEDS to guide international health electives: An enriching experience in Uganda defined for a Canadian surgery resident. *Canadian Journal of Surgery, 51*, 289-295.

Grudzen, C., & Legome, E. (2007). Loss of international medical experiences: Knowledge, attitudes and skills at risk. *BMC Medical Education, 7*, 47.

Grusky, S. (2000). International service learning: A critical guide from an impassioned advocate. *American Behavioral Scientist, 43*, 858-867.

Gupta, A. R., Wells, C. K., Horwitz, R. I., Bia, F. J., & Barry, M. (1999). The international health program: The fifteen-year experience with Yale University's Internal Medicine Residency Program. *American Journal of Tropical Medicine and Hygiene, 61*, 1019-1023.

Hall, A. L. (2006). Whose progress? The language of global health. *Journal of Medicine and Philosophy, 31*, 285-304.

Hanson, L. (2008). Global citizenship, global health, and the internationalization of curriculum. *Journal of Studies in International Education, 10*, 1-19.

Haq, C., Rothenberg, D., Gjerde, C., Bobula, J., Wilson, C., Bickley, L., et al. (2000). New world views: Preparing physicians in training for global health work. *International Family Medicine, 32*, 566-572.

hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. New York: Routledge.

Houpt, E., Pearson, R., & Hall, T. (2007). Three domains of competency in global health education: Recommendations for all medical students. *Academic Medicine, 82*, 222-225.

Inhorn, M. C., & Janes, C. R. (2007). The behavioural research agenda in global health: An advocate's legacy. *Global Public Health, 2*, 294-312.

Irwin, A., & Scali, E. (2007). Action on the social determinants of health: A historical perspective. *Global Public Health, 2*, 235-256.

Izadnegahdar, R., Correia, S., Ohata, B., Kittler, A., terKuile, S., Vaillancourt, S., et al. (2008). Global health in Canadian medical education: Current practices and opportunities. *Academic Medicine, 83*, 192-198.

Jotkowitz, A. B., Gaaserud, A., Gidron, Y., Urkin, J., Margolis, C. Z., & Henkin, Y. (2004). Evaluation of student attitudes and knowledge in a new program in international health and medicine. *Medical Teacher, 26*, 574-576.

King, N. B. (2002). Security, disease, commerce: Ideologies of postcolonial global health. *Social Studies of Science, 32*, 763-789.

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

Korthius, P., Nekhlyudov, L., Ziganshin, A., Sadigh, M., & Green, M. L. (2002). Implementation of a cross-cultural evidence-based medical curriculum. *Medical Teacher, 24*, 444-446.

Krieger, N. (2001). Theories for social epidemiology in the 21st century: An ecosocial perspective. *International Journal of Epidemiology, 30*, 668-667.

Leininger, M. (1998). Nursing education exchanges: concerns and benefits. *Journal of Transcultural Nursing, 9*(2), 57-63.

McKinley, D. W., Williams, S. R., Norcini, J. J., & Anderson, M. B. (2008). International exchange programs and US medical schools. *Academic Medicine, 83*(10), 53-57.

Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education, 74*, 5-12.

Midgley, J. (1990). International social work: Learning from the third world. *Social Work, 35*, 295-301.

Morris, M. A. (2000). *Utilizing the theories of Mezirow and Freire to foster learning of the principles of health promotion during international nursing practice experiences.* Unpublished master's thesis, University of British Columbia, Vancouver, Canada.

Mutchnick, I., Moyer, C., & Stern, D. (2003). Expanding the boundaries of medical education: Evidence for cross-cultural exchanges. *Academic Medicine, 78*(1), 1-5.

Niemantsverdriet, S., van derVleuten, C. P. M., Majoor, G. D., & Scherpbier, A. J. J. A. (2005). An explorative study into learning on international traineeships: Experiential learning processes dominate. *Medical Education, 39*, 1236-1242.

O'Sullivan, E. V., Morrell, A., & O'Connor, M. A. (Eds.). (2002). *Expanding the boundaries of transformative learning: Essays on theory and praxis*. New York: Palgrave Macmillan.

Panosian, C., & Coates, T. J. (2006).The new medical "missionaries": Grooming the next generation of global health workers. *New England Journal of Medicine, 354*, 1771-1773.

Pinto, A. D., & Upshur, R. E. G. (2007). Global health ethics for students. *Developing World Bioethics, 9*(1), 1-10.

Ramchandani, S. R. (2007). The impact of international health and humanitarian medicine on US graduate medical education. *Resident and Staff Physician, 53*(9). Retrieved November 15, 2008, from http://www.residentandstaff.com/issues/articles/2007-10_12.asp

Ramsey, A. H., Haq, C., Gjerde, C. L., & Rothenberg, D. (2004). Career influence of an international health experience during medical school. *Family Medicine, 36*, 412-416.

Razack, N. (2002). A critical examination of international student exchanges. *International Social Work, 45*, 251-265.

Shah, S., & Wu, T. (2008). The medical student global health experience, professionalism and ethical implications. *Journal of Medical Ethics, 34*, 375-378.

Shimahara, E. (2006). *Discovering riches in world poverty: Medical students' perspectives on an international elective in India: An ethnographic exploration*. Unpublished master's thesis. Retrieved November 15, 2008, from http://www.stanford.edu/dept/SUSE/ICE/monographs/shimahara.pdf

Shor, I., & Freire, P. (1986). *A pedagogy for liberation: Dialogues on transforming education*. South Hadley, MA: Bergin & Garvey.

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010

Smith, J. K., & Weaver, D. B. (2006). Capturing medical students' idealism. *The Annals of Family Medicine, 4*(1), 32-37.
Suchdev, P., Ahrens, K., Click, E., Macklin, L., Evangelista, D., & Graham, E. (2007). A model for sustainable short-term international medical trips. *Ambulatory Pediatrics, 7*, 317-320.
Thompson, M. J., Huntington, M. K., Hunt, D. D., Pinsky, L. E., & Brodie, J. J. (2003). Educational effects of international health electives on US and Canadian medical students and residents: A literature review. *Academic Medicine, 78*, 342-347.
Tropical medicine: A brittle tool of the new imperialism. (2004). *Lancet* (Editorial)*, 363*, 1087-1088.
University of Saskatchewan. (2010). *Making the links*. Retrieved January 13, 2010, from http://www.gprc.ab.ca/library/Homepage/Help/LSC/LSC%20pdfs/APA%20Referencing.pdf
Wagner, G. G., & Brown, C. C. (2002) Global veterinary leadership. *Veterinary Clinics of North America: Food Animal Practice, 18*, 389-399.
World Health Organization. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health* (Final Report of the Commission on Social Determinants of Health). Retrieved November 15, 2008, from http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf

Bios

Lori Hanson, assistant professor in the Department of Community Health and Epidemiology at the University of Saskatchewan, specializes in community-based approaches to global health issues and focuses her teaching and research on their social determinants. As the College of Medicine's internationalization chair (2002-2007), she created and developed global health programs, including IMEs.

Sheila Harms is a child and adolescent psychiatrist, assistant professor in the Departments of Pediatrics and Psychiatry and Behavioral Neurosciences at McMaster University. Her research interests include synthesizing and translating evidence for children's mental health in low-income settings as well as explanatory models of mental illness for children and youth in Sub-Saharan Africa.

Katrina Plamondon, a registered nurse specializing in population health practice, is an assistant professor with the School of Nursing, Mount Royal University. A board member for Canadian Coalition for Global Health Research (CCGHR), her research interests include policy and health, local experiences with global policy shifts, and social determinants of HIV/AIDS.

Downloaded from jsi.sagepub.com at UNIVERSITY OF SASKATCHEWAN LIBRARY on July 11, 2010