Perceptions and Expectations of Host Country Preceptors of Short-Term Learners at Four Clinical Sites in Sub-Saharan Africa

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ABSTRACT

OBJECTIVE: The demand for global health electives among medical students and residents has grown substantially, yet perspectives of international hosts are not well documented. This study aimed to assess how host country supervising clinical preceptors perceive learners on short-term global health electives of up to 6 weeks.

METHODS: This study used a cross-sectional survey design and assessed international clinical preceptors' perceptions of short-term learners' (STLs) professional behaviors, medical knowledge, competency in systems-based care, as well as the benefits and burdens of hosting STLs. Surveys were sent to all clinical preceptors (n = 47) at 4 clinical sites in sub-Saharan Africa in 2015.

RESULTS: Thirty-two preceptors (68%) responded to the survey. Most respondents (97%) were satisfied in their role hosting STLs and reported that STLs enhanced patient care and the professional image of the clinical site. Nearly half of respondents (45%) reported decreased self-perceived efficiency in clinical care tasks. Qualitative data identified concerns related to STLs' professionalism and teamwork. Respondents also identified knowledge gaps in understanding differences in health systems and epidemiology in host country settings. Respondents preferred that rotations last at least 4 weeks and that STLs complete predeparture training.

CONCLUSIONS: STLs were largely positively regarded by international host clinical preceptors. To improve mutuality of benefits, sending institutions should ensure learners understand host country expectations of professionalism and that learners are well prepared for medical, ethical, and cultural challenges through participation in predeparture curricula that prepare them clinically and emotionally for these international experiences. Rotations of at least 4 weeks may enhance benefits to learners and hosts.

KEYWORDS: clinical electives; clinical preceptors; global health; medical education; residents; sub-Saharan Africa

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WHAT'S NEW

Despite growing interest in global health electives (GHEs) among medical trainees, perspectives of international hosts are poorly documented. International host clinical preceptors in our study viewed learners completing short-term GHEs favorably and identified areas to improve mutuality of benefits.

GLOBAL HEALTH ELECTIVES (GHEs) are becoming increasingly popular as medical students and residents from many disciplines express desire for global health experiences during their training. As many as 30% of graduating medical students in the United States and 21% of residents in pediatrics participate in GHEs during training.[1,2] These short-term learners (STLs) are medical trainees with varying levels of experience who typically spend up to 6 weeks completing GHEs at host institutions around the world, where they learn about the practice of medicine in resource-limited settings by caring for patients and receiving elective credit. Participation in a GHE during training has the potential to alter a learner's career trajectory. Studies have documented that STLs who participate in GHEs are more likely to practice primary care medicine, obtain degrees in public health, and practice medicine among underserved populations in their home countries.[3–5] Moreover, returned STLs demonstrate greater appreciation of the importance of cross-cultural communication, application of cost-effective practice, enhanced knowledge of tropical

diseases, and improved physical examination skills with decreased reliance on laboratory testing and imaging.[6–10]

Despite the well-studied benefits that STLs derive from GHEs, relatively few studies have documented benefits and burdens of STLs on host institutions from the perspective of the clinical preceptors abroad.[11–13] One report noted host site staff incorporated more evidence-based medicine into their practice as a result of hosting STLs.[14] The burdens of hosting STLs include financial burdens on local resources[15] and extra time spent orienting STLs that may detract from clinical responsibilities.[16–18] Moreover, STLs with inadequate supervision may do more harm than good to patients.[19,20] Last, concerns have been raised that STLs receive inadequate guidance and financial support from sending institutions for short-term electives.[21–23]

Although many have identified the need to study the effects of STLs on host institutions in resource-limited areas,[24–26] few published reports document the host institution's perspective.[11–13] We aimed to address this gap in global health education literature by surveying clinical preceptors at 4 sites in sub-Saharan Africa that host STLs to better elucidate the perceptions of hosts and their expectations of STLs.

METHODS

This study used a cross-sectional survey design and was conducted within the Baylor International Pediatric AIDS Initiative at Texas Children's Hospital (BIPAI) clinic network. Established in 1996, BIPAI now includes a network of clinical sites globally that provide health care, training and clinical research focused on HIV/AIDS, tuberculosis, malaria, malnutrition, and other conditions that affect the health and well-being of children and families worldwide.[27] STLs have been completing GHEs within the BIPAI clinics since 2006. Approximately 100 STLs per year originating from over 50 institutions in the United States and Canada travel to sub-Saharan Africa to complete international rotations at 1 of 4 BIPAI clinical sites (Botswana, Lesotho, Malawi, and Swaziland). Approximately two-thirds of the STLs visiting these sites are residents and one-third are medical students. Approximately half are from Baylor College of Medicine and half are from other institutions.

We developed the questionnaire after an in-depth review of the literature related to learners in the global health setting. The authors included individuals with content and survey design expertise. We designed survey questions to address the following domains: learner professionalism, medical knowledge, and competency in systems-based care, procedural proficiency, and predeparture training. We formulated survey questions through an iterative process until consensus was achieved. One of the authors (TLT) experienced in survey design reviewed the questionnaire. We piloted the survey with clinical preceptors and site administrators that work with STLs at non–study sites within sub-Saharan Africa. Internal assessment and feedback from these individuals improved the clarity of the items and general format. Survey questions were both qualitative and quantitative using both nominal and continuous responses. The 46-item survey comprised multiple-choice questions, 5-point Likert scales, and questions allowing for free response. Among the Likert scale questions, several were negatively worded to minimize acquiescence bias. Surveys were written in English.

After receipt of institutional review board approval from Baylor College of Medicine (protocol H-36307), local administrative staff identified host country preceptors at the Botswana, Lesotho, Malawi, and Swaziland clinical sites. We uploaded the clinical preceptor survey onto a Web site that compiles survey questions (SurveyMonkey; http://www.surveymonkey.com/), and in 2015 local administrative staff distributed it via e-mail invitation to clinical preceptors, who were defined as physicians, clinical officers, or senior administrators who had worked with STLs on a regular basis for at least 6 months. All those surveyed were employees of Baylor College of Medicine, BIPAI, or the individual local nongovernmental organizations. We gave respondents 1 month to complete the survey and sent 1 e-mail reminder a week before survey closing. We did not allow duplicated surveys or collect identifiable patient data.

We managed all data in secured Microsoft Excel 2013 (Microsoft, Redmond, Wash) spreadsheets. We performed descriptive statistical analyses in Microsoft Excel 2013 and Stata 13 (StataCorp, College Station, Tex). For questions using the traditional Likert scale, we categorized responses and computed percentages of respondents in each category. We performed the Mann-Whitney U analysis to assess differences between groups of respondents. To assess preceptors' views on ideal duration of rotation, we utilized the Wilcoxon signed-rank test. We analyzed all qualitative data using a conventional content analysis approach.[28] Two reviewers (HL, CAR) coded open-ended responses for common themes.

RESULTS

We sent the survey to all host country clinical preceptors (n = 47) at the BIPAI clinic sites in 4 sub-Saharan African countries, and 32 preceptors responded (68% response rate). Respondent demographics are found in Table 1. Survey responses by category are summarized in the Figure.

The majority of respondents (n = 28, 97%) were satisfied in their role precepting STLs, and most thought that STLs were overall beneficial to their clinical sites (n = 26, 87%). Moreover, most perceived that STLs improved the professional image of the clinical site (n = 25, 83%) and enhanced clinical staff education (n = 23, 77%). Respondents also indicated, through selection from a list, that STLs participate in many important extraclinical activities during their rotations including preparing scholarly presentations for clinic staff (n = 29, 91%), community outreach (n = 21, 66%), developing a handout or tool for use in clinic (n = 17, 53%), research (n = 14, 44%), bringing new evidence-based clinical information (n = 14, 44%), and eliciting a change in clinical practice (n = 7, 22%).