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Current Status of Family Medicine Faculty Development in Sub-Saharan Africa

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BACKGROUND AND OBJECTIVES: Reducing the shortage of primary care physicians in sub-Saharan Africa requires expansion of training programs in family medicine. Challenges remain in preparing, recruiting, and retaining faculty qualified to teach in these pioneering programs. Little is known about the unique faculty development needs of family medicine faculty within the sub-Saharan African context. The purpose of this study was to assess the current status and future needs for developing robust family medicine faculty in sub-Saharan Africa. The results are reported in two companion articles.

METHODS: A cross-sectional study design was used to conduct a qualitative needs assessment comprising 37 in-depth, semi-structured interviews of individual faculty trainers from postgraduate family medicine training programs in eight sub-Saharan African countries. Data were analyzed according to qualitative description.

RESULTS: While faculty development opportunities in sub-Saharan Africa were identified, current faculty note many barriers to faculty development and limited participation in available programs. Faculty value teaching competency, but institutional structures do not provide adequate support.

CONCLUSIONS: Sub-Saharan African family physicians and postgraduate trainee physicians value good teachers and recognize that clinical training alone does not provide all of the skills needed by educators. The current status of limited resources of institutions and individuals constrain faculty development efforts. Where faculty development opportunities do exist, they are too infrequent or otherwise inaccessible to provide trainers the necessary skills to help them succeed as educators.

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The Global Health Workforce Alliance and World Health Organization (WHO) estimated a gap of 7.2 million professional health workers in 2012, set to rise to 12.9 million over the next decade.[1] This shortage disproportionately affects sub-Saharan Africa, where there are fewer than 0.5 physicians per 1,000 population.[2] A sufficient number of health service workers with adequate training and skill are needed to address this gap.[1-4]

The World Health Assembly resolved that primary care health

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systems include family medicine physicians.[5] In addition, academic and government leaders in sub-Saharan Africa have advocated for a larger family medicine pipeline.[6] University training programs in family medicine are expanding throughout sub-Saharan Africa, often with the assistance of faculty from developed nations.[7] These programs aim to prepare locally trained, competent family physicians to reduce the shortage of postgraduate trained primary care physicians.

One challenge these programs face is to recruit family medicine-trained faculty and to prepare them for educational excellence and leadership.[6] Graduates may be encouraged to remain at their training programs as teaching faculty but often do not have access to training designed to help them succeed as educators. As family medicine expands as a specialty in sub-Saharan Africa, very little is known about the training needs of these pioneer faculty.

Many publications have described the development of family medicine in sub-Saharan Africa.[6-10] Additionally, there is a robust body of literature addressing the need for faculty development (FD), including that specific to family medicine. There is, however, a particular lack of information about the specific needs of family medicine faculty within sub-Saharan Africa.[11,12]

It has been argued that African contexts are unique and that the commonly articulated characteristics of family medicine may not provide appropriate training models for these contexts.[13,14] Efforts to develop a uniquely African approach to family medicine have been growing in recent years, but these efforts have focused on workforce development and trainee education. There is a paucity of literature describing FD needs of African family medicine educators[7,15,16] The lack of rigorous training models that respond to local needs is detrimental to optimally educating future primary care physicians. Understanding what current faculty need to improve their teaching skills will be instrumental in maintaining morale, promoting the specialty, improving health care quality, and strengthening the primary care workforce in sub-Saharan Africa.

The purpose of this qualitative needs assessment was to describe the current status and future needs for developing robust family medicine faculty in sub-Saharan Africa. The results are reported in two companion articles. This article describes what family medicine faculty in sub-Saharan Africa identify as the current status of faculty development within their contexts. The second article, Larson P. et al. Future of Family Medicine Faculty Development in sub-Saharan Africa[17] will describe what faculty identify as specific needs and recommendations for the future of family medicine FD in sub-Saharan Africa.

Methods

Study Design

Given a desire for an in-depth needs assessment and limited family medicine faculty in the region, a qualitative approach was selected. As with many qualitative methods, our goal was not to develop generalizable outcomes but rather to discover the shared understanding of the current state and desired development of faculty training at institutions from within the region at a given point in time.[18] Investigators anticipated significant variation in responses by institution and country. Therefore, an in-depth, semi-structured interview of individual physician instructors was used. We sought to describe the primary themes as close to the original data as possible with sufficient interpretation to promote understanding. Consequently, we have followed a qualitative description approach to data analysis.[19,20] Authorship reflects collaboration among international medical educators with expertise in the development of family medicine in sub-Saharan Africa. Authors contributing to specific aspects of the study relevant to local or technical expertise will be designated using initials.

Ethical Approval

The University of Pittsburgh Institutional Review Board conducted a facilitated review and determined ethical oversight was not required for this needs assessment. Ethical approval was granted by Moi University Institutional Research and Ethics Committee, Kenya (IREC/2014/167), the University of Ghana Ethical and Protocol Review Committee (MS-Et/M.5-P4.10), and Addis Ababa University Family Medicine Program in Addis Ababa, Ethiopia (3/17/2015). Additional review and authorization was provided by World Organization of Family Doctors (WONCA) Africa Region President (3/2014). Financial incentives were not provided to informants. Ethical principles for conducting human subjects research, including voluntary participation of informants and confidentiality of research data was maintained throughout the study.

Instrument Development

Table 1 provides a list of 17 questions asked of each informant. Initial questions were developed by PL following review of available published and unpublished faculty development questionnaires and subsequently reviewed by all authors including those familiar with local cultural and linguistic norms.[21] Eleven questions were revised (see Table 1) following initial data collection to reduce redundancy and improve focus of data.

Informants were instructed that FD includes all educational activities designed to improve faculty skills relating to teaching, scholarship, and administrative responsibilities. Competency refers to all desirable knowledge, skills, or attitudes necessary to meet minimum expectations of performance. To test agreement with these definitions, informants in West Africa were asked to describe their own understanding.

Table 1: Initial and Revised (R) Questions Asked of Informants

	Open-Ended Questions Asked of Each Informant
1	Please briefly describe your past medical training and current professional responsibilities.
1R	Please briefly tell me about your current professional responsibilities.
2	Please describe the current state and availability of family medicine postgraduate training at your institution.
2R	Please describe the current state of family medicine training at your institution.
3	Please describe the current number and the medical education of each of the faculty at your institution who are teaching in family medicine postgraduate programs.
3R	Please tell me about any formal teacher training you have completed.
4	Please describe the current state and availability of faculty development training for family medicine postgraduate programs in your context.
4R	Please describe the current state and content of any formal teacher training available in your context.
5	If faculty development training is available, who supports it financially?
6	What specific educational criteria are considered in hiring new faculty at your institution? Do these criteria relate specifically to teaching skills?
6R	What specific formal teacher training is required for employment as faculty at your institution? What specific teaching experience is required for employment as faculty at your institution?
7	What knowledge about educating should faculty have?
8	What educational skills should faculty have?
9	What attitudes toward education should faculty have?
9R	What attitudes about teaching should faculty have?
10	What would be the most effective way to teach these competencies?
10R	What would be the most effective way to develop these teaching characteristics in faculty?
11	When during an aspiring educator's career path should these competencies be taught?
11R	When during a faculty career path should these teaching characteristics be taught?
12	How would you assess that faculty possess these competencies?
12R	How would you assess that faculty possess these teaching characteristics?
13	In summary, what are the most important characteristics that will enable a faculty member to be successful?
13R	What are the most important characteristics that enable a faculty member to be successful?
14	Please describe any factors that limit further training of faculty for their educational roles.
15	What factors would enable you to overcome these limitations? Please describe any factors that have already enabled you to overcome these limitations.
15R	What factors would or have enabled you to overcome these limitations?
16	Would you provide the name and contact information of any other person or persons who you believe, based on responsibility, education, and/or experience, would be able to contribute to this study?
17	Is there anything else you would like to share with me?

Sample Selection and Informant Recruitment

Investigators with country-specific expertise in the development of family medicine in sub-Saharan Africa were asked to identify current physician instructors from established or developing postgraduate training programs and departments of family medicine. Selected individuals were directly engaged in the instruction of sub-Saharan African trainees in the principles of family medicine. Given the early developmental stage of family medicine in many sub-Saharan African countries and the limited number of faculty at any one institution, we aimed to

complete 30 total interviews to include regional representation from among identifiable and available faculty. Commonly, postgraduate trainees are recruited to become faculty in sub-Saharan family medicine training programs. For this reason some current senior trainees were recruited as informants, especially in Ethiopia where the government is directing a rapid expansion of family medicine training programs. Due to limitations of interview personnel and scheduling, selection was limited to English-speaking informants.

Data Collection

Interviews were conducted by regional teams utilizing a standardized interview field guide (available at http://resourcelibrary.stfm.org/viewdocument/family-medicine-faculty-development-1) and informational script regarding the purpose, method, and anonymity of the study. CG and SO conducted the interviews in East Africa between September and December 2014 in locations within East Africa convenient to both interviewers and informants, which included attendance at the Fourth East African Family Medicine Initiative Conference, November 2014 in Nairobi, Kenya. RL either conducted or coordinated interviews in West Africa utilizing three postgraduate trainees who were trained using detailed review of the interview field guide and peer practice. All interviews were completed in May 2015 in locations within West Africa, including those who attended the 4th World Organization of Family Doctors (WONCA) Africa Region Conference, May 2015 in Accra, Ghana. AE and SG conducted interviews in Ethiopia in June and July 2015 in Addis Ababa, Ethiopia.

All interviews were conducted in English and digitally recorded. Administrative personnel in Kenya transcribed interviews from the Kenya data set verbatim. Two interviews were analyzed directly from the audio data due to recording quality that limited transcription. Seven interviews from Ethiopia were transcribed by AE. Remaining interviews from the Ethiopia and Ghana data sets were transcribed verbatim by scribie.com according to established professional standards.

Data Analysis

Three investigators developed a codebook (available at http://resourcelibrary.stfm.org/viewdocument/family-medicine-faculty-development-1) through initial review of all transcripts from the east Africa data set and by iterative discussion. Initial review of a select number of transcripts from each additional data set revealed wide agreement in previously identified codes. Therefore, the original codebook was applied as a template for subsequent data sets. All transcripts were systematically coded by two coders using Atlas.ti (Atlas.ti GmbH, www.atlasti.com). Any difference in coding was arbitrated through discussion.

Due to the collection of three data sets over approximately 6 months, the initial coding and thematic review of each data set was conducted separately. The data identified for each code were reviewed for themes and subthemes that described the content as closely as possible. The themes and subthemes were then compared for all three data sets with identification of themes that best captured agreement across all data sets. All investigators, including interviewers and those with country and regional expertise, reviewed all identified themes and subthemes to promote agreement with the identification, selection, and organization of the final analysis. Any disagreement or suggested revision was resolved through discussion.

Results

A total of 37 interviews were conducted. Table 2 shows the countries represented. Informants were physicians responsible for the direct instruction of postgraduate trainees or medical students in the discipline of family medicine and included the full spectrum of academic rank and training role including senior trainees, community-based physician teachers, program directors, and university department heads or chairs.

The findings are organized in three main themes:

Theme 1: FD opportunities are available, but regular participation is uncommon (Table 3).

FD opportunities are available but are largely accessed through individual self-study. The opportunities are coordinated through multiple avenues including university departments, in-country partners, and international partners. Informants reported several specific training programs such as Foundation for the Advancement of International Medical Education and Research (FAIMER, http://www.faimer.org/), East Africa Family Medicine Initiative/University of Calgary (EAFMI,

Table 2: Informant Country

Country	Number of Informants
Kenya	6
Uganda	2
Rwanda	2
Tanzania	1
Nigeria	5
Ghana	6
Ethiopia	14
Togo	1

Table 3: Theme 1: FD Opportunities Are Available But Regular Participation Is Uncommon

Sub-Theme	Representative Quotes
FD opportunities are available through individual self-study and coordinated by university departments, in-country partners, and international partners.	• "[At] the moment I have been teaching myself; I have not had any kind of developmental training. Most of it is on personal, sort of looking for opportunities to train and looking for relevant materials on-line." • "Well, there are several trainings given to all the faculties of Addis Ababa University, both pedagogical trainings are being given and education, medical education training are also being given different forms in different associations. Since we don't have family medicine graduates of Ethiopian nationality who have been... So, it has... The influence on it is probably not that much that I know of.…Well, for instance, I think today there is going to be a masters program in medical education for faculties. I think that people have been selected and... I think it's ___ also universities are sponsoring this program. But there are also other programs which are similar, medical education programs, masters programs which are being done in collaboration with universities from abroad, mainly from the US, and some of them are sponsored also by MEPI."
All identified FD opportunities required full or partial financial contribution from informant or institution. No opportunities were fully funded by international partners.	• "You only get a ticket from [the international partner] and upkeep and the institution usually pays for food accommodation for those five days and it is only 3 sessions, until your session us ended and then on-line modules, which you do on weekly basis." • "Yes, myself. I didn't mind. I went, because I had to pay for the ticket to go to America, although the course was free."
FD options are not commonly specific to family medicine	• "So in ___ University we have a medical education department, which offers training and in terms of medical education and how to do assessments. Not only on family medicine but also the other disciplines where there are M. Med Programs. So we have regular, usually quarter[ly] FD seminars, where the emphasis is a lot on how to do assessments—both work-based assessments that are needed for each of the programs…But specific family medicine training, post-training we don't have a lot of that, but just discipline specific apart from probably conferences that we attend, like recently we attended the East Africa Family Medicine Initiative Conference where now you get more of family medicine specific but within the institution there is that kind of faculty development plan." • "… what I think is important is really to find a way how to have all people involved in health professions training and specifically family medicine did some faculty development training. You know the challenge we face at ___ and which I also know is happening in other universities most in East Africa but also in African continent especially in sub Saharan Africa, family medicine is being taught by non-family physicians. You know that one has a big problem because the family medicine has its own philosophy, it has its own approach and if we can have people trained to teach family medicine. I think it would be very helpful for the growth and improvement of our discipline."
Learning can be formal or informal	• " ... There are visiting guests and lecturers and so on, teaching us how to teach residents…. How to teach residents to teach. They come and give us trainings. They have come and also we have been learning from them, from the family physicians from abroad. They come here and they give us seminars and also we get to see patients with them straight away at the health center. So I think we learn firsthand from them. So they give us clues of how to teach students and how to see patients directly from them. And we also have been taking trainings, like specific trainings, so we have to keep the teaching of trainings and so on and so I think it has helped us a lot to teach…"
Learning occurs during postgraduate, early years of supervised practice, or as faculty	• "So he has been using the opportunities at the University for Continuous Medical Education Development, whose sessions are given at the university at least once a year. Sometimes and when it's a good year we have 2, once in every semester...."

(continued on next page)

Table 3: Continued

FD training can be a single day of training or recurring/long term	• "…throughout the year, at the beginning of the class we would have medical educationist and we have two faculty trained in medical education in [in-country university] and they will link up with a professor who comes, who has links to [in-country university] and [Canadian and British institutions] and they come an[d] deliver a talk. For example, this time we are going to discuss about ethics and then, we would be left with tasks to do—an ethical scenario to discuss …in an interacti[ve] way….They will actually check that you were actively participating and although it is not examinable, it's a way of assessing that you have actually gone through the entire course. You pick different modules throughout the year and at the end of the year you get a …instructor certificate and … if you have finished can you move on to the faculty."
Regional differences exist in the availability of FD.	• "We have other courses, also run by the Postgraduate Medical College of Nigeria and the West African College of Physicians, which also involved in... Basically focused on faculty development. The National College... Postgraduate Medical College of Nigeria, they even organize another one which is in their annual event, which we have a TOT for trainers all across the country, in collaboration with the West African College of Physicians. So we're having the next one in June, in Abuja, Nigeria." • ".... The only program I hear about is, there's a newly introduced training in pedagogy by the university. It's not directed specifically towards those of us in medicine or the health sciences, but the university wants every academic staff to have a diploma in pedagogy in order to continue to teach in the university. So, it's become obligatory, so everybody is going through that program. It's organized by the institute or School of Education at the main campus."

http://www.ucalgary.ca/ghealth/partnerships), West African College of Physicians/Doctors as Educators (http://www.wac-physicians.org/content/college), Medical Education Partnership Initiative (MEPI, http://www.fic.nih.gov/programs/pages/medical-education-africa.aspx), University of Toronto, and FUNZO Kenya (http://www.intrahealth.org/page/funzokenya).

Funding mechanisms for FD were closely tied to the choice of program partner (eg, university, international partner, etc). Co-funding was common and required the individual or institution to have some commitment to the training. International partners did not wholly fund any FD. No informant described paying for their own FD, although informants did report self-directed learning without describing who funded it.

Training was undertaken during postgraduate, early years of supervised practice, or as faculty. Formats included individual training sessions and serial interactions or visits over extended periods of time. Instruction was accomplished via formal presentations or informal sharing of experiences.

No informant described a FD program at their institution that they considered robust other than the Ethiopian informants who report a new 16-week required pedagogical training series for all faculty at Addis Ababa University. In most settings, FD experiences are not designed to fill identified gaps in knowledge or skills. Informants reported inadequate capacity of their medical education department and/or lack of university support. Informants recognized FD and especially family medicine-specific training as important to sub-Saharan Africa. One informant reported that family medicine is often taught by physicians from other specialties.

Theme 2: Informants place value on teaching competency but it appears to be a lower priority for institutions (Table 4).

All 12 informants from West Africa described general understandings of professional competency and FD that were conceptually consistent with definitions provided to informants in other data sets. One informant, however, displayed a personal misunderstanding, and three reported an institutional misunderstanding of FD. Three informants responded to interview questions regarding proposed content of FD with answers that would be more appropriate to the question, "How is the approach to patient care different in family medicine compared to other specialties?" However, the remaining informants clearly understood FD as a concept and expressed concern that teaching competency was not emphasized or valued highly at their institution.

Informants note that their institutions' hiring criteria typically do not include teaching experience and competence, and the institutions infrequently host or support participation in FD. This may reflect poor understanding or prioritizing at the institutional level of competence in teaching. These institutional characteristics were felt to perpetuate a "presumption of competence" that doctors are inherently good (or "good enough") teachers.

Informants were able to describe other components of the hiring process or requirements for current family medicine faculty. The most consistent requirement was the need

Table 4: Theme 2: Informants Place Value on Teaching Competency But It Appears to Be a Lower Priority for Institutions

Sub-Theme	Representative Quotes
"Presumption of competence" is widespread.	• "...I didn't even know that there is a science to this. It is like, it is another profession on its own. Teaching is another profession on its own. I am a doctor; that's another profession. That's it, I didn't automatically become a doctor. I had to go through a process of learning to qualify as a doctor. Then I had to go through some other process of learning to become a teacher, that's my opinion. So my guess is all our graduates are at that stage now. They just don't know that these two things are different. And they have to go through this learning process." • "You know traditionally, in _____, specifically where I know very well, I think it was assumed that once you are a doctor then you should be able to teach. Which myself I don't think would be good enough…" • "Or maybe at a higher level there's just no resources or training available or maybe even at an institution level maybe the institution says, "Why do we need to train teachers? If you're a good pediatrician you're a good teacher." And they don't see... Maybe the institution doesn't see the difference between clinical skills and teaching skills." • "…the training for medicine both in undergraduate and postgraduate does not give foundations for the trainees to be teachers." • "It is assumed that the... In the process of going through the fellowship program, you are exposed to... The residency program exposes you to training on the clinical skills and academic skills you need for practice."
Most institutions lack a long-term, organized, coherent FD program for faculty.	• "So the[re] are opportunities for faculty development at the university but in my view they are not well-designed to actually make the faculty competent in the teaching and in their work." • "...So, we don't have these organized training programs for faculty development, so we don't have opportunity to get them."
FD is not mandatory in most employment or academic settings.	• "Because even this SAFRI project…it is not mandatory that somebody should go for it." • "But now we encourage, once you are employed you are as part of the faculty development, you are encouraged to take part in the various medical education programs by both colleges."
Teaching experience is not required for hiring new faculty.	• "I don't think we can be too picky." • "No, not really, no. So far, I don't know of any system or any method of screening for training skills or teaching skills. Mainly, this is on the experience of the individual, the qualification depending on what kind of degree, usually second degree or from a certificate, specialty certificate is required. But in some new departments or departments who do not have adequate number of staff or who failed to attract senior or experienced staff, they even go for new graduates with no experience and who have good grades. It all depends on what you can get on the market." • "INTERVIEWER: So, what specific formal teacher training is required for employment as faculty at your institution? • "INFORMANT: There is none."

for a Master's degree (or higher or UK equivalent). Research and publishing could be required for promotion but were not always required for hiring. Informants implied that clinical experience was required, but this may be found in all prospective faculty by the nature of specialty training in sub-Saharan Africa.

Most institutions were reported to lack a long-term, organized, coherent FD program for faculty. One informant reported that their institution needed help creating FD opportunities, and another reported attempts to share "best practices" informally without FD expertise. FD is not mandatory in most employment or academic settings experienced by the study informants.

Theme 3: Current faculty identify many barriers to participating in FD programs (Table 5). Faculty have competing responsibilities including clinical and administrative duties and government service. One informant described personal experience of a government service requirement limiting engagement in medical education programs. New family medicine programs are

Table 5: Theme 3: Current Faculty Identify Many Barriers to Participating in FD Programs

Sub-Theme	Representative Quotes
Informants lack protected time to participate in FD.	• "As I said like our department we are operating at 50% staffing rate. So if 4 of you go for training, then the department closes. So even really time is important and also low numbers of faculty is a limiting factor because when we are to go for further training in anything and you are a few in the department, then really the departmental activities slow down."
FD is expensive	• "Funding? Yes, because you see there is no free program you have to get money which many times is not readily available." • "...and then the last abomination is personal sacrifice. That where you may not get a full sponsorship as other departments would have, but you can make the sacrifice that you're determined to. And hopefully that as time goes on, as they recognize the contributions of family medicine to medical education, they will recognize the need to have academic departments...." • "...it would be better if you could assign or hire a person where financial issues is not a concern, well-off lecturers, because what we see here is... Because of the inadequate salaries, people tend to focus less on the training. Rather they would go around to fill up the gap in their financial status…"
Decreased perceived importance of teaching competencies at the institutional level may be reflected in the lack of support for FD of faculty members.	• "…a third factor would be the fact that we really don't attach a lot of importance to medical education. We need to change our attitude about that because it's not just about being told to teach, it's about being taught about how to teach" • "One, the numbers of the faculty members. Two, remuneration and allowances. Number three, the time factor. Number four, the people who are doing the training itself are not available. And then, the last one is, sometimes non-compliance and apathy from the college itself."
Family medicine programs are currently vulnerable and program development in general is in a critical phase.	• "…our first batch were residents who become trained in ___, will come out in the next two years. So they will sort of add to faculty, but we need to hold on for family medicine [for] the next two or three years." • "I think that the family medicine is a very new discipline in Ethiopia and it's just starting. It's very vulnerable. And I think that faculty development is gonna be, is of vital importance to the success of family medicine. And I think that it should really have a priority." • "My hope is that this process could be taken beyond [this] study. If [you] could eventually now start the process of inducting, especially nurturing the Family Physicians because they are very few universities that are starting the program…"

almost always small. This means a limited number of individuals would be available to cover clinical and teaching responsibilities while colleagues participate in enrichment activities. Informants described poor communication and dissemination of FD opportunities within the institution.

Informants reported concern regarding expense and a lack of personal funds to participate in rigorous FD programs. Informants describe that budget priorities for institutions and individuals reveal the limited value ascribed to teaching competencies and FD.

Informants stated that family medicine programs in sub-Saharan Africa are currently vulnerable, and program development in general is in a critical phase. This creates interest in FD but also concerns about limited funds and other resources needed to strengthen and sustain the new departments.

Discussion

This is the first article to identify perceptions of the availability and value of FD opportunities among sub-Saharan African family medicine physicians, trainees, and their institutions. Thirty-seven informants from Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Tanzania, Togo, and Uganda participated. Qualitative analysis of these semi-structured interviews revealed three primary themes.

Overall, our findings highlight a disparity in the availability of FD and inadequate financial support for faculty participation in programs that are available. Some FD programs were favorably described, such as the West African College of Physicians' Doctors as Educators and Addis Ababa University's pedagogical training. However, the majority of eligible informants either had

not participated in these programs or had completed a single training without a plan for further skill development. The lack of FD opportunities may reflect competition with other institutional or government priorities for time and funds at the level of individual physician and/or institution. Institutional leaders may not appreciate the need to nurture skill sets beyond clinical acumen. The small number of FD opportunities creates a barrier for clinicians with limited schedule flexibility for continuing education.

The importance of high-quality FD is recognized by informants, but this is not consistently reflected in the stated or implicit priorities of their institutions. Current faculty identify many challenges in participating in FD programs, including lack of protected time, funding, and limited awareness of locally available FD opportunities. This may reflect competition for limited financial and human resources available for patient care and other critical mandates. As a result, more robust FD will likely only occur with either: (1) sponsorship from outside organizations, (2) creation of mandatory teacher training or related continuing medical education, or (3) a fundamental change in decision-makers' perceptions of the role of FD in strengthening training institutions and health care delivery.

Our study has some limitations. The sampling of informants was non-random and limited in scope because of the barriers of language and geography. Not all available faculty, training programs, or countries are represented and countries with established or actively developing training in family medicine were more heavily represented. However, we believe that our purposeful design, with diverse informant selection, mitigates these limitations. Although not logistically available, our results could have been strengthened by validating our analysis directly with our informants. However, considerable agreement was found among interviewers and investigators with expertise in each country represented. Additional demographic and academic information of informants may be desirable, however, the study design limited analysis to what informants chose to disclose about themselves and detailed probing would quickly have rendered the informant identifiable.

We have described a shared understanding of the current state of faculty training at institutions from within sub-Saharan Africa at a given point in time. Consequently, we have not attempted institution-specific or country-level comparisons or sought outcomes generalizable to all African contexts.

In conclusion, sub-Saharan African family medicine physicians and trainees value good teaching and recognize that clinical training alone does not provide all of the skills needed by educators. Limited financial resources of institutions and individuals constrain the development of more robust FD. FD opportunities exist but are inadequate to provide any one physician or faculty group with the skill set needed to strengthen and sustain departments of family medicine.

In our companion article, Larson P. et al. Future of Family Medicine Faculty Development in sub-Saharan Africa[17] we further explore the implications for effective program development and collaborations with regional and international partners. Our study provides educational leaders, administrators, and policy makers with a thoughtful view of family medicine FD in sub-Saharan Africa. This work will facilitate the development of effective training programs needed to address the growing shortage of family medicine physicians.

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Presentations: Interval progress presentation of the STFM Groups on Global Health and Faculty Development including development of the interview instrument, the status of international project collaboration, and discussion of preliminary regional results were made at the following conferences: 2015 American Academy of Family Physicians (AAFP) Global Health Workshop, Denver, CO; 2015 STFM Annual Spring Conference, Orlando, FL; 2014 STFM Annual Spring Conference, San Antonio, TX; 2013 AAFP Global Health Workshop, Baltimore, MD; and 2013 STFM Annual Spring Conference, Baltimore, MD.

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