Strengthening Public Health Leadership in Africa: An Innovative Fellowship Program

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Abstract

Problem

The Ebola virus disease crisis in West Africa revealed critical weaknesses in health policy and systems in the region, including the poor development and retention of policy leaders able to set sound policy to improve health. Innovative models for enhancing the capabilities of emerging leaders while retaining their talent in their countries are vital.

Approach

Chatham House (London, United Kingdom) established the West African Global Health Leaders Fellowship to help develop the next generation of West African public health leaders.

The innovative program took a unique approach: Six weeks of intensive practical leadership and policy training in London and Geneva bookended a 10-month policy project conceived and carried out by each fellow in their home country. The program emphasized practice, site visits and observation of U.K. public health organizations, identifying resources, and networking. Strong mentorship throughout the fieldwork was a central focus. Work on the pilot phase began in June 2016; the fellows completed their program in September 2017.

Outcomes

The pilot phase of the fellowship was successful, demonstrating that this

"sandwich" model for fellowships—whereby participants receive focused leadership training at the start and end of the program, minimally disrupting their lives in-country—offers exciting possibilities for enhancing leadership skills while retaining talent within Africa.

Next Steps

On the basis of this successful pilot, a second cohort of eight fellows began the program in October 2018. The expanded African Public Health Leaders Fellowship has become a central activity of Chatham House's Centre on Global Health Security.

Problem

Health policy leadership has been highlighted as an area of need in West Africa following the Ebola virus disease crisis (2013–2016)—as evinced by numerous commissions convened during and after the crisis.¹ That crisis exposed the fragility of local, national, regional, and international health systems. In response, the Centre on Global Health Security at Chatham House (London, United

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Kingdom) and the Royal Institute of International Affairs (Geneva, Switzerland) initiated an innovative pilot initially called the West African Global Health Leaders Fellowship (WAGHLF) in 2016. (The name of the expanded project currently in place has changed; see Next Steps.)

Tailoring policy and program development frameworks to meet the needs of specific geographies and populations is recognized as critical to improving population health.² The West African nations that constitute the West African Health Organization (population 340 million) are diverse in culture and language, but have limited resources for health. None of these countries meets the World Bank recommendation of 2.3 physicians per 1,000 population³; hence, retention of talent is a development priority.

Approach

Structure and overview

The WAGHLF aimed to reinforce effective public health leadership and policy skills for individuals emerging as the next generation of public health leaders in West Africa. A recently published report provided some insight

into an evolving transtheoretical and behavior change model—a "sandwich" model—potentially applicable to a fellowship experience. Chatham House offers a number of policy fellowships, predominantly in-residence in London. Given both (1) Chatham House's focus on developing young leaders who are able to translate evidence into policy and (2) the imperative to retain health care leaders in their current positions in West Africa, we took an innovative "sandwich" approach to designing the fellowship.

The fellowship was a phased, longitudinal learning experience designed to maximize talent retention. The sandwich structure entailed intensive instruction in London and Geneva bookending experiential and mentored learning in-country. This design, applied globally, has proven effective in research and training programs and in institution building when retention of talent is a priority.6 Following an intensive month in London during which fellows visited public health facilities and met face-to-face with mentors, the fellows undertook 10-month, in-country, applied policy projects. During these 10 months, intensive expert mentorship was provided through regular teleconferences and email. At the end of the year, the fellows spent a week in Geneva to facilitate their understanding of the international system and to enhance their networks before finally returning to London to formally present their projects (see Figure 1).

Specific program objectives were as follows: for participants (1) to increase their leadership skills and their policy development and analysis skills; (2) to develop knowledge and skills in disease surveillance, prevention, and control; (3) to understand global architecture and resources available for disease prevention and control at all levels; and (4) to develop and complete an applied public health policy project relevant to their own country or region. A central goal was enhancing fellows' insight into policymaking processes, linking sectors at the global and local levels. The ultimate objective was to strengthen public health capacity in Sub-Saharan Africa by providing leadership and policy development for current leaders. Thus, ensuring the tenure of the future leaders within their organizations—that is, preserving career ascendancy—was a central requirement for design.

As we began the design and application phase of the program in June 2016, we mobilized experts from Chatham House's Centre on Global Health Security to provide high-quality mentorship. Importantly, we linked the fellows with Chatham House's extensive networks of individuals to create a community of practice for fellows. Our partners at the Graduate Institute of International and Development Studies in Geneva provided

additional orientation to global health diplomacy.

Pilot program

Potential participants applied for available spots by completing a comprehensive form in which they outlined the policy research projects they were considering and their motivation to participate in the program. The application required an employer's letter stipulating that six weeks abroad would not compromise the candidate's employment status, compensation, or career goals, and that the candidate would be assured flexibility to conduct the fellowship project.

Chatham House received 140 applications and reviewed the 116 complete applications through a rigorous objective multiple-reviewer quantitative selection process. (Supplemental Digital Appendix 1, available at http://links.lww.com/ACADMED/A654, describes the applicant pool.) Top-ranked applicants were interviewed by telephone. For this pilot phase, three candidates were selected, and funding from the Rockefeller Foundation provided modest support for the three fellows' work.

Initial intensive four-week public health and leadership training took place in London during September–October 2016 (Table 1). Topics and activities for each day of Weeks 1–3 are shown in Supplemental Digital Appendix 2, available at http://links.lww.com/ACADMED/A654. Practical policy implementation was emphasized. The specific combination of technical topics and site visits was designed by experts

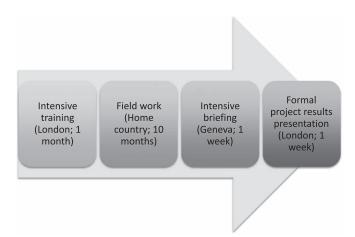


Figure 1 Timeline for the pilot phase (2016–2017) of the West African Global Health Leaders Fellowship (now called the African Public Health Leaders Fellowship).

from Chatham House's Centre on Global Health Security, most of whom held coincident academic appointments at other institutions. As they worked on their in-country projects, each fellow was mentored remotely by a senior fellow from Chatham House.

The three inaugural fellows focused on the following projects: (1) national implementation of the International Health Regulations (IHR), which are endorsed by all World Health Organization (WHO) member states and are currently being implemented worldwide; (2) identifying public–private partnerships that had shown promise during the Ebola virus disease crisis so as to leverage them to improve health; and (3) expanding universal health coverage and extending coverage to populations in West African countries.

Mentor/mentee contact was monthly at a minimum. Other Chatham House staff were enlisted for specific support (e.g., statistical analyses) as needed. Systematic monitoring through structured telephone interviews was conducted on a quarterly basis by the program director (A.M.K.). On completion of the project, the Global Health Centre at the Graduate Institute of International and Development Studies hosted a week in Geneva (see Table 1).

The pilot phase concluded in September 2017 with fellows formally presenting their projects over one week at Chatham House.

Outcomes

All three fellows completed the program. Each was able to maintain employment tenure while completing the project. Fellows were productive, as evinced through their project activities and their publications and presentations. One of the fellows built an evidence base for effective IHR strengthening in Ghana, integrating IHR capacity building and ensuring a OneHealth component within a proposed initiative for the national health system. An assessment tool was also put in place.

Another fellow examined the role of the private-sector contribution to the management of the Ebola outbreak, redefining the framework for private public collaboration as well as working in her capacity in the Nigerian Ministry of Health to contribute to legislation

Table 1 Topics Covered During the Intensive "Bookend" Weeks (in London and Geneva) of the Pilot West African Global Health Leaders Fellowship^a (2016)

Site (timing)	Topics/activities	Comment
London (4 weeks, September, October 2016)	LeadershipSurveillanceInternational Health Regulations	Site visits to local PH facilities and to the human animal infections and risk surveillance (HAIRS) group were particularly useful
	 Site visits to functioning PH sites in the United Kingdom 	Cross-cultural leadership covered by a senior professor from Cass Business School (of the City University of London)
	 Project development and programming with mentors 	
Geneva (1 week, September 2017)	Global Health Diplomacy	 More than 20 health professionals in 15 global health, trade, and policy organizations provided guidance on the UN system and the NGO ecosystem of global health
	 Visits to WTO, OCHA, Global Fund, GAVI, WHO, Red Cross, Red Crescent, etc. 	
London (1 week, September 2017)	Finalizing resultsPresentations	Formal presentations at Chatham House with partners including DFID, Wellcome Trust, and others

Abbreviations: PH indicates public health; WTO, World Trade Organization; OCHA, Office of Coordination of Humanitarian Affairs (United Nations); GAVI, Global Alliance for Vaccine Introduction; WHO, World Health Organization; UN, United Nations; NGO; nongovernmental organization; DFID, Department for International Development (United Kingdom).

that established the Nigerian Centre for Disease Control and helped increase the budget for measles immunization.

The third fellow published a review highlighting the inequities in social health insurance schemes in Africa, which was presented at the International Health Economics Congress in Boston and won a prize at another international conference in Rwanda.

Fellows have improved their leadership and their analytic and communication skills, and they have been increasingly participating in global conversations about population health. Two presented "Lightning Rounds for Emerging Leaders" at the inaugural Women Leaders in Global Health Conference held at Stanford University (October 2017). One fellow presented work, "Managing Future Global Public Health Risks by Strengthening Civilian and Military Health Services," at the WHO meeting in Indonesia (October 2017). Two fellows also participated in a WHO Executive Board side session on "The Future of Health in Africa" (January 2018.)

We formally evaluated the pilot—both quantitatively through questionnaires of the fellows and their mentors, and qualitatively through structured interviews of the fellows and their mentors (see Supplemental Digital

Appendix 3 available at http://links.lww.com/ACADMED/A655).

Five themes emerged from our analysis of the questionnaire responses and interview transcripts:

- 1. Fellowship timeline: The intensive scheduling for the initial and final phase course work, while applauded, was found to be logistically taxing.
- Mentor support: While remote mentorship was rigorous, no local mentor was identified for this pilot program. Local mentorship was an area for enhancement.
- 3. Project requirements vs work schedule: Fellows held their full-time positions while conducting their projects. They suggested that in future iterations, employers specify and guarantee a minimum time allowance dedicated to the project component of the fellowship (e.g., 20 hours a month).
- Presenting/publishing work: The fellows highly valued opportunities to present and/or publish their findings. Such opportunities should be more systematically identified during the course of the fellowship.
- 5. Potential for health policy leadership role: The fellows, mentors, and program managers all unanimously

agreed that the fellowship significantly improved leadership skills and that the fellows were well positioned for a future leadership role in public health in their home country.

Feedback from the fellows indicated that the workload was challenging. The fellows reported that the WAGHLF offered opportunities that strengthened their ability to build networks and collaborate with a diverse range of stakeholders. Fellows stated that learning about networking and how to gain consensus during the initial London course was crucial to their development. Site visits in Geneva provided operational examples of how to bring theory into practice. Fellows suggested that the week in Geneva be moved forward to the beginning of the fellowship for the next cohort.

The evaluation documented that this fellowship provided concrete shortterm outputs, created potential for effective policy change, and promoted the fellows' leadership roles within their home countries. Of the five themes we uncovered in our evaluation, all but one—opportunities to present and/or publish findings—were overwhelmingly positive. Longer-term follow-up is valuable in evaluation of such programs.8 A follow-up questionnaire at six months (see Supplemental Digital Appendix 4, available at http://links.lww.com/ ACADMED/A655) confirmed the initial findings and documented the retention and promotion of fellows.

Next Steps

Given its success in the pilot phase, the sandwich model remains core to the fellowship, now in its second year. The fellowship, currently called the African Public Health Leaders Fellowship, has expanded to eight fellows. Importantly, the findings from the pilot have informed the design of the expanded fellowship. The nesting of fellowships in an ongoing community of practice is ensured with the ongoing networking component of this design, and, as the inaugural fellows suggested, local mentors will be incorporated into the African Public Health Leaders Fellowship.⁹

Collaboration between the global North and global South is increasingly important, and the type of intensively mentored fellowship described here facilitates that

^aThe fellowship is now called the African Public Health Leaders Fellowship.

collaboration. Notably, this model was also used successfully in Fogarty International Center research and training efforts and by the Afya Bora consortium, the latter documenting long-term retention of skills and organizational advancement among its graduates.¹⁰ In areas such as Sub-Saharan Africa, a model that develops leaders but retains their tenure in their home countries is innovative and promising. The second group of eight African fellows, recruited from a field of nearly 400 applicants, began the program in October 2018. They have already begun their work, and through this work, an ever-increasing pool of public health leaders will be available to the region.

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References

- 1 Moon S, Leigh J, Woskie L, et al. Post-Ebola reforms: Ample analysis, inadequate action. BMJ. 2017;356;j280.
- 2 Anyangwe SC, Mtonga C. Inequities in the global health workforce: The greatest impediment to health in sub-Saharan Africa. Int J Environ Res Public Health. 2007;4:93–100.

- 3 Godt S, Mhatre S, Schryer-Roy AM. The change-makers of West Africa. Health Res Policy Syst. 2017;15(suppl 1):52.
- 4 Daniels J, Farquhar C, Nathanson N, et al; Afya Bora Consortium Working Group Members; Afya Bora Consortium Working Group Members. Training tomorrow's global health leaders: Applying a transtheoretical model to identify behavior change stages within an intervention for health leadership development. Glob Health Promot. 2014;21:24–34.
- 5 Chatham House, The Royal Institute of International Affairs. Queen Elizabeth II Academy for Leadership in International Affairs Fellowships. https://www. chathamhouse.org/academy/fellowships. Published 2018. Accessed February 26, 2019.
- 6 Kimball AM, Curioso WH, Arima Y, et al. Developing capacity in health informatics in a resource poor setting: Lessons from Peru. Hum Resour Health. 2009;7:80.
- 7 Fenny AP, Yates R, Thompson R. Social health insurance schemes in Africa leave out the poor. Int Health. 2018;10:1–3.
- 8 Mugabo L, Rouleau D, Odhiambo J, et al. Approaches and impact of non-academic research capacity strengthening training models in sub-Saharan Africa: A systematic review. Health Res Policy Syst. 2015;13:30.
- 9 Chatham House, The Royal Institute of International Affairs. African Public Health Leaders Fellowship. www. chathamhouse.org/about/structure/ global-health-security/african-publichealth-leaders-fellowship. Published 2018. Accessed February 26, 2019.
- 10 Monroe-Wise A, Mashalla Y, O'Malley G, et al; Afya Bora Consortium Working Group. Training tomorrow's leaders in global health: Impact of the Afya Bora Consortium Fellowship on the careers of its alumni. BMC Med Educ. 2016;16:241.