Rwanda Health and Healing Program

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Background

In 2005, Thomas Jefferson University (TJU) medical students and faculty from the Department of Family and Community Medicine (DFCM) initiated the Rwanda Health and Healing Project, a community oriented health project in two rural villages in Rwanda. Since its inception, over 80 students and faculty from TJU have traveled to Rwanda to work with these villages on a variety of public health and income generating projects.¹ As part of this program, a partnership was formed with the Rwanda Village Concept Project (RVCP), a Rwandan medical student driven public health and community development organization.

In 2007, a group of dedicated Jefferson students from the student organization Jeff HEALTH worked with faculty from the DFCM to establish an exchange program to bring RVCP medical students to Jefferson. Through the Jeff HEALTH-RVCP partnership, Jefferson selects 2-3 Rwandan students per year through a rigorous essay and interview process for two-month long TJU rotations focused on primary care, community health, and public health. Since 2007, thirty-one Rwandan students have successfully completed this exchange program.

The curriculum for this exchange has become increasingly formalized in response to changes in medical curriculum requirements in Rwanda and feedback from participants. Directed by an interdisciplinary group of resident and faculty global health clinical mentors across the Jefferson Departments of Pediatrics, Family and Community Medicine, Emergency Medicine, and Obstetrics and Gynecology, the current curriculum is designed to introduce the students to the many dimensions of clinical practice, health systems, and medical education in the United States.

As Rwanda's population faces a rapidly increasing burden of chronic disease, there is a growing need to train all general practitioner level physicians, nurses, and community health workers in the prevention, diagnosis, and management of diabetes, hypertension, obesity, and cardiovascular disease. Therefore, one of the main educational focuses of the exchange program is to expose Rwandan students to different clinical and community-based approaches to addressing these medical and public health challenges. Through working with clinicians during individual office-based patient visits, observation of DFCM's diabetes group visit program, and participating in TJUH's Center for Urban Health chronic disease community screening and education programs, students are exposed to potential models for chronic disease prevention and care in Rwanda.

Over the years, students and residents have completed several program evaluations aimed at exchange program improvement. The last program evaluation was completed in 2017 as part of a TJU College of Population Health independent clerkship. This evaluation focused exclusively on the experiences of the Rwandan students completing their clinical experience in Philadelphia.

The exchange Program Directors were particularly interested in laying the foundation for an assessment of the potential social and professional impact of exchange alumni networking.

Methods

In order to evaluate the Rwandan exchange, a survey was designed to obtain feedback on program effectiveness in terms of leadership capabilities, alumni interactions, and overall program quality. Based on thematic analysis from a previous survey of RVCP exchange alumni completed in 2009, the survey focused on the key areas of global public health, comparative health systems, clinical skills, management of non-communicable diseases, advocacy, and cultural awareness. In addition to the survey, Program Directors used semi-structured in-depth interviews to capture authentic narratives about the experiences of RVCP alumni. These interviews focused on motivations for medical careers, experiences at TJU, current professional involvement, and future aspirations. Surveys were web-based and interviews were conducted inperson in Rwanda during the Spring of 2017.

Results

In total, twenty-five alumni completed the survey. As evidenced by the responses listed in Table 1, through the exchange Rwandan alumni increased their knowledge and understanding of the US healthcare system, strengthened advocacy and communication skills, and improved confidence in their clinical abilities. Additionally, alumni demonstrated leadership competencies through experiences in their respective career fields and volunteering with organizations focused on healthcare. As summarized in Table 2, the experiences ranged from mentor to board member to department head.

Program Effectiveness	Extremely	Very	Moderately	Somewhat	Not at all
How effective was the program in					
increasing your knowledge and					
understanding of global public health					
(e.g. clinical and public health					
practice)?	48%	44%	8%	0%	0%
How effective was the program in					
increasing your knowledge of and					
understanding of the U.S. health					
system?	48%	32%	20%	0%	0%
How effective was the program in					
increasing your knowledge of the role					
of primary care physicians in a health					
system?	76%	24%	0%	0%	0%
How effective was the program in					
increasing your knowledge of the					
prevention and management of non-					
communicable diseases?	64%	20%	16%	0%	0%
How effective was the program in					
demonstrating physician advocacy?	32%	64%	4%	0%	0%

Table 1. Program effectiveness questions along with aggregated responses

How effective was the program in helping you feel more confident in your communication skills?	60%	36%	4%	0%	0%
How effective was the program in					
helping you feel more confident in					
your advocacy skills?	32%	60%	8%	0%	0%
How effective was the program in					
helping you feel more confident in					
your clinical skills and abilities?	28%	56%	16%	0%	0%

Table 2. Summary of the different roles alumni have taken on since their involvement in the program

Leadership Position	<u># of alumni</u>	
Mentor	8	
Committee Member	12	
Board Member	7	
Department Head	6	
Clinical Director	1	
Chief Resident	1	
Other	6	

* In some cases, alumni held multiple positions

Five in-depth interviews were completed with alumni. Although the interviews are still being analyzed, the main themes that have emerged include: health systems, professional development, self-determination, collaboration, community, influence, advocacy, and disease.

As part of my Master's of Public Health (MPH) clerkship, I had the opportunity to work on the Rwanda Health & Healing Project (RHHP) directed by Thomas Jefferson University (TJU) Department of Family and Community Medicine (DFCM) faculty. As part of an update program evaluation, I helped develop a survey but we also wanted to capture authentic narratives about the experiences of RVCP alumni. Coincidentally, two TJU family medicine residents were going to Rwanda for two weeks in late April, splitting time between doing clinical work at a district hospital, teaching/meeting with RVCP physician students, and looking at the state of primacy care in Rwanda. Interestingly, I lived in Rwanda in 2014 and I was eager to make a return trip. While I was only in Rwanda for less than one week, the insight I was able to glean from face to face time with these individuals about their remarkable journeys, motivations, and persistence in the face of challenge was an invaluable element of the authentic narratives which we relied upon as a primary source to inform our thematic analysis. During the interviews, I encountered a few unanticipated challenges. First and foremost, was my inability to detach emotionally from the subject matter. I didn't think much in

advance about where the direction of conversation could lead given the open-ended style of the questions. I realized shortly into my first interview where I heard a first-hand account of parents being murdered and being "hunted to death" and the "miraculous" story that ensued that I probably could've better prepared myself to hear harrowing accounts of motivations to become a doctor given experiences living through the 1994 Rwandan genocide. The interviews I conducted were awe-inspiring, not only because of the stories and experiences they shared on their remarkable journey to RVCP-Jeff HEALTH but because of the absolute commitment and dedication they have to improving the health of their fellow citizens. The trust and confidence that these individuals had in me to listen to their stories and capture the essence of their motivation and influence contributed significantly to my ability to understand, communicate, and interact with people across cultures further developing my attitudes toward cultural differences. - Student Reflection

Discussion

Through extensive involvement and engagement with their communities, the alumni demonstrate a profound commitment to improving the overall quality of healthcare in their country for the benefit of all Rwandans and more specifically the most vulnerable populations. The commitment to the health and wellbeing of those less fortunate and the determination to improve the quality of life of these individuals was apparent in each personal account.

One specific example that highlights alumni involvement in their communities is the role that an alumnus played in the Rwandan organization Young Professionals Chronic Disease Network (YP-CDN). YP-CDN is an independent, non-profit, non-governmental, global multidisciplinary community organization dedicated to policy analysis, advocacy and social change for non-communicable diseases (NCDs). One month after returning from the RVCP-Jeff Health exchange, driven by their exchange experience, one alumnus became a committee member of YP-CDN with the aim to identify the main gaps in the management and prevention of NCDs in Rwanda, continuing with advocacy to address those identified gaps. Because mortality rates for breast and cervical cancer are high in Rwanda, YP-CDN started advocating for change in health policy around cervical cancer screening for women over the age of forty.

Survey results indicate a high level of perceived effectiveness of the program. Educational areas of the exchange that are gradually becoming more formalized and need improvement include research, population health, and physician advocacy. As part of a global trend in medicine, research is becoming an increasingly important requirement of academic scholarship and medical training in Rwanda. However, there exists very little in-country guidance for students conducting research. Given that the RVCP students selected for exchange have extensive backgrounds in community health programming, program coordinators hope to build a practical and targeted research curriculum focused on basic biostatistics, program development and evaluation, and community-based participatory research methods. In addition, DCFM faculty are also working with medical educators in Rwanda to better align the exchange curriculum with the National University of Rwanda's required community and population health curriculum

As demonstrated by this survey, the RVCP exchange students now populate the private, public, and non-profit health sector of Rwanda--functioning as clinicians, researchers, educators, and health administrators. The expanding personal and professional networks that have emerged as a result of this unique program of global health education have provided the foundation for an important model of interdisciplinary peer mentorship across multiple levels of learners. These preliminary results suggest that this model of bi-directional global health education has the potential to build local and international global health capacity in a way that is fundamentally more equitable, inter-professional, and relevant to the future practice of global health.

References

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