

Perspectives and Debates

A student-led global health education initiative: reflections on the Kenyan Village Medical Education Program

Christopher John,^{1,2} Heidi Asquith,^{1,2} Tom Wren,^{1,3} Stephanie Mercuri,^{1,4} Sian Brownlow^{1,2}

¹Melbourne University Health Initiative, Level 4, Alan Gilbert Building, ²Faculty of Medicine, Dentistry and Health Sciences, ³Melbourne School of Population and Global Health, ⁴Melbourne Law School, The University of Melbourne, Parkville, Victoria, Australia

Significance for public health

The Kenyan Village Medical Education (KVME) Program is a student-led global health initiative that involves exploring well-established strategies for the prevention of disease through workshops that are conducted in southern rural Kenya. These workshops are tailored to the unique needs and circumstances of rural Kenyan communities, and are delivered to community leaders, as well as to adults and children within the wider community. Aside from the KVME Program's emphasis on reducing the burden of preventable disease through health education, the positive impact of the KVME Program on the Program's student volunteers also deserves consideration. Throughout the month-long KVME Program, student volunteers are presented with opportunities to develop their understanding of cultural competency, the social and economic determinants of health, as well as the unique challenges associated with working in resource-poor communities. Importantly, the KVME Program also represents an avenue through which global health leadership can be fostered amongst student volunteers.

Abstract

The Kenyan Village Medical Education Program is a student-led global health initiative that seeks to improve health outcomes in rural Kenya through culturally appropriate health education. The month-long program, which is organised by the Melbourne University Health Initiative (Australia), is conducted each January in southern rural Kenya.

Introduction

The Kenyan Village Medical Education (KVME) Program is a preventive health education initiative that was established in 2008 by student volunteers, who were at the time studying at the Melbourne Medical School. The Program has since become incorporated within the Melbourne University Health Initiative (MUHI), which is a student-led organisation that is based at The University of Melbourne. The Program seeks to reduce the burden of easily preventable conditions such as pneumonia, diarrhoea, trachoma, and malaria in rural Kenya through disease-specific health education. The KVME Program also seeks to encourage and facilitate the usage of health-related resources such as water filtration systems and first-aid supplies.

The Program is centred upon a series of disease-specific preventive health education workshops that are conducted by student volunteers over the course of several weeks in southern rural Kenya. Whilst these workshops are delivered to adults and children within the wider community, the Program especially seeks to engage mothers and influen-

tial community leaders. The Program's local Kenyan partners are responsible for advertising the Program to rural communities.

The student volunteers that participate in the KVME Program typically originate from a diverse array of disciplines, including medicine, biomedical science, public health, law, arts, and commerce. The recruitment of six student volunteers to the Program typically occurs six months prior to the Program, and involves an online application form, as well as two rounds of panel interviews, which are conducted by the Program's coordinators. The Program's coordinators also organise a series of pre-departure training sessions (Table 1), which are designed to equip student volunteers with the necessary skills and competencies to effectively conduct health education workshops whilst in Kenya. The Program's health education workshops are tailored to the unique needs and circumstances of rural Kenyan communities, based on the advice of the Program's local Kenyan partners. These workshops are developed by the Program's coordinators with reference to educational resources such as *Robbins & Cotran Pathologic Basis of Disease* and *BMJ Best Practice*.^{1,2} The structure and content of these health education workshops have been revised in recent years in an attempt to facilitate increased participant involvement. The KVME Program also utilises local translators to ensure that the content of each workshop is accessible and easily understandable. As the program is conducted annually, several rural Kenyan communities are typically revisited each year, albeit by different cohorts of student volunteers. This enables the student volunteers to reinforce the key messages of each workshop, deliver additional information, and importantly, to strengthen the Program's relationships with rural communities.

The KVME Program has been designed with financial sustainability in mind. The Program's inherent expenses are predominantly self-funded by student volunteers. Additional fundraising is also conducted in Melbourne, Australia, prior to the Program, which supports the purchase of water filtration systems, first-aid supplies, and educational materials. The KVME Program's Kenyan participants are not required to financially contribute to the Program.

This case report discusses the objectives and outcomes of the KVME Program, which include providing student volunteers with opportunities to develop their understanding of cultural competency, the social and economic determinants of health, and the unique challenges associated with working in resource-poor communities, as well as fostering their passion for global health. This case report also discusses the challenges that have confronted the Program.

Positive experiences for student volunteers: fostering a passion for global health

Global health is a discipline that attracts university students from a

wide variety of backgrounds, and engages them according to their own interests and passions. A heightened awareness of international health disparities is inspiring university students to seek out opportunities that provide experience in the field of global health, both domestically and internationally.³ A growing interest and enthusiasm amongst students has contributed to the increasing number of global health courses and programs on offer worldwide, and has resulted in the incorporation of global health into mainstream medical education.^{4,5} According to a recent study, more than 90% of surveyed Australian medical students believe that global health ought to be integrated into the mainstream medical curriculum.⁶ Moreover, students from non-medical backgrounds are increasingly acknowledging, and responding to the need for trans-disciplinary collaboration in the field of global health. As Rowson *et al.*⁷ have outlined, the field of global health involves much more than implementing technical and medical interventions to counter the health inequities that continue to plague the developing world. Rather, the importance of trans-disciplinary solutions that challenge preconceived norms ought to also be recognised.⁷

Whilst the limitations of programs such as the KVME Program have been well documented,⁸ the KVME Program provides an important gateway through which student volunteers are able to experience global health in action. Whether these student volunteers eventually decide to work domestically or abroad, international mobility provides a valuable opportunity for bi-directional learning, and allows student volunteers to gain a more thorough understanding of the cultural, social, political, environmental, and economic factors that impact upon health globally.⁹ The KVME Program unites student volunteers from different disciplinary backgrounds, who share the common goal of reducing the global burden of preventable disease. Forty-eight student volunteers have participated in the KVME Program since the Program's inception in 2008 (David Liew 2015, Personal Communication, 14 November). Furthermore, several of these student volunteers have returned to Kenya to coordinate subsequent iterations of the KVME Program. Thus, for many student volunteers, the KVME Program provides an invaluable opportunity to gain practical experience in a resource-poor setting; the Program is also an important avenue through which global health leadership may be fostered amongst student volunteers.

Attitude changes amongst student volunteers

One of the major challenges that confronts student volunteers, as well as the Program's coordinators, is a realisation of the difficulty that is associated with effecting constructive behavioural change. Largely,

this realisation occurs in the context of preconceptions about the developing world, volunteering, and global health more generally. Whilst student volunteers are invariably well intentioned, the health literacy of rural Kenyan communities is frequently underestimated. Furthermore, student volunteers may also overestimate the extent to which preventive health education workshops practically alter the health attitudes and practices of rural Kenyan communities. This misunderstanding may be a product of students' lack of experience in resource-poor settings, and may also stem from the misleading manner in which international volunteering programs are frequently marketed to university students as opportunities to merge international tourism with impactful volunteerism. Although the KVME Program provides student volunteers with cultural sensitivity training prior to departure (Table 1), some degree of cultural insensitivity persists, and is evident at the Program's outset in Kenya. Thus, developing cultural competency is frequently a challenging process for student volunteers.

As the KVME Program is conducted in a resource-poor setting, student volunteers invariably gain a more holistic understanding of the unique problems that afflict resource-poor communities over the course of the Program. Student volunteers come to appreciate the difficulties associated with effecting constructive behavioural change, and realise that the Program's goals ought to take precedence over Western ideals, such as those that promote gender equality, or an acceptance of homosexuality. Importantly, this process involves developing cultural sensitivity, which is a fundamental prerequisite for effectively conducting health education workshops within any culturally diverse community. Ultimately, student volunteers come to more thoroughly appreciate the complexities of working in the field of global health, as well as in resource-poor settings more generally.

Challenges and future directions

As the KVME Program's primary objective is to reduce the burden of relatively prevalent, but preventable disease through culturally appropriate health education, the ongoing evaluation of this objective ought to inform the manner in which the KVME Program is conducted in the future. To date, a systematic protocol for assessing the impact of the KVME Program's educational workshops on the health behaviours of rural Kenyan communities has yet to be established. Whilst anecdotal, and informal qualitative evidence obtained each January in Kenya suggests that some degree of health behavioural change results from the health education workshops that have been conducted in previous iterations of the KVME Program, a systematic means of evaluating the

Table 1. Overview of the Kenyan Village Medical Education student volunteer training program.

Training session	Details	
Prior to departure: Melbourne, Australia (September)	Program orientation	Important program information; introduction to Kenya (language; culture); student volunteer introductions
	Disease-specific education of student volunteers	The student volunteers are educated about the content of each disease-specific workshop by receiving presentations and printed material(s) on: pneumonia; diarrhoea; trachoma; first-aid; malaria; type II diabetes mellitus; osteoarthritis; asthma; HIV/AIDS
	Perspectives from a global health professional	An experienced global health professional discusses his/her previous experience working in culturally diverse and resource-poor settings with the student volunteers
	Workshop rehearsal(s)	The student volunteers present disease-specific workshops to each other and receive verbal feedback on their performance from the Program's coordinators
On arrival: Ngong, Kenya (January)	In-Country orientation	Cultural and Safety Briefing(s) by Kenyan partners; Kiswahili language Lessons; 2-3 days at local Kenyan Medical clinic

extent of this behavioural change either qualitatively, or quantitatively would provide a more robust basis for improving the effectiveness of these health education workshops in the future.

The model of social and behavioural change communication (SBCC) formalises the use of systematic, evidence-based, and participatory communication strategies to change behaviours by positively influencing knowledge, attitudes, and social norms.¹⁰ Whilst the KVME Program's health education workshops feature some aspects of effective SBCC, such as targeted emphases on reducing the burden of preventable disease through the dissemination of information to regional communities, the future successes of the KVME Program are likely to depend upon developing, and incorporating novel strategies that facilitate interaction, participation, and critical analysis into each health education workshop.¹¹

Conclusions

The benefits of the KVME Program are manifold, and include potentially improving health outcomes in rural Kenyan communities through culturally appropriate health education, as well as providing student volunteers with first-hand experience in the field of global health. The Program enables student volunteers to increase their understanding of cultural competency, the social and economic determinants of health, as well as the unique challenges associated with working in resource-poor communities. Importantly, the KVME Program also represents an avenue through which global health leadership can be fostered amongst student volunteers, and for some, the Program may mark the beginning of a lifelong contribution to the field of global health.

Correspondence: Christopher John, Melbourne University Health Initiative, Level 4, Alan Gilbert Building, The University of Melbourne, Parkville, Victoria 3010, Australia.

Tel.: +61.423.936.931.

E-mail: cjohn@muhi.org.au

Key words: Student; Kenya; community health; cultural sensitivity; preventive healthcare; global health education.

Acknowledgements: the authors gratefully acknowledge the assistance and support of the Kenyan Village Medical Education (KVME) Program's Kenyan partners: Wambua Munyao and Mary Wambui; as well as the KVME Program's former coordinators: David Liew, Douglas Tjandra, and Hayley Stratton. The authors would also like to acknowledge the generous guidance provided by Dr. Timothy Moore, Associate Professor Robyn Woodward-Kron, and the Nossal Institute for Global Health.

Contributions: CJ, HA, TW, SM, and SB all contributed equally to the design and drafting of the manuscript; CJ, HA, and SB evaluated and revised the initial version of the manuscript for submission; CJ evaluated and approved the revised version of the manuscript for publication.

Conflict of interest: the authors are involved as coordinators of the Kenyan Village Medical Education (KVME) Program. The authors declare no financial conflict of interest.

Received for publication: 22 November 2015.

Accepted for publication: 7 February 2016.

©Copyright C. John et al., 2016

Licensee PAGEPress, Italy

Journal of Public Health Research 2016;5:646

doi:10.4081/jphr.2016.646

This work is licensed under a Creative Commons Attribution NonCommercial 4.0 License (CC BY-NC 4.0).

References

1. Kumar V, Abbas AK, Aster JC. Robbins and Cotran pathologic basis of disease. Philadelphia: WB Saunders; 2014.
2. BMJ Best Practice. London. Available From: <http://bestpractice.bmj.com/best-practice/welcome.html>
3. Kerry VB, Ndung'u T, Walensky RP, et al. Managing the demand for global health education. *PLoS Med* 2011;8:1-5.
4. Drain PK, Primack A, Hunt DD, et al. Global health in medical education: a call for more training and opportunities. *Acad Med* 2007;82:226-30.
5. Mitchell RD, Jamieson JC, Parker J, et al. Global health training and postgraduate medical education in Australia: the case for greater integration. *Med J Aust* 2013;198:316-9.
6. Roberts-Thomson R, Smith T, Mitchell R. Importance of global health in undergraduate medical curricula. The Australian medical student perspective. Association for Medical Education in Europe Conference. Glasgow: AMEE; 2010.
7. Rowson M, Willott C, Hughes R, et al. Conceptualising global health: theoretical issues and their relevance for teaching. *Global Health* 2012;8:36.
8. Fulawka S, Berry T. The role of student-run organizations within global health promotion initiatives: commentary and call for research. *Glob Health Promot* 2010;17:54-7.
9. Haq C, Rothenberg D, Gjerde C, et al. New world views: preparing physicians in training for global health work. *Fam Med* 2000;32:566-72.
10. Health Communication Capacity Collaborative. Social and behavioural change communication infographic. Available From: http://ccp.jhu.edu/wp-content/uploads/JHU_Social_and_Behaviour_FULL_OUTLINES_V2.pdf. Accessed on: 27 September 2015.
11. World Health Organization. Health promotion. Track 2: health literacy and health behavior. 7th Global Conference on Health Promotion: track themes. Available From: <http://www.who.int/healthpromotion/conferences/7gchp/track2/en/>. Accessed on: 27 September 2015.