Evaluating the Efficacy of Training Programs for Community Health Workers in Rural Uganda

Elizabeth Butler  
*University of Massachusetts Medical School, Elizabeth.Butler@umassmed.edu*

Edward O’Neil  
*Omni Med*

Zachary Tabb  
*Omni Med*

*See next page for additional authors*

Follow this and additional works at: [http://escholarship.umassmed.edu/ssp](http://escholarship.umassmed.edu/ssp)

Part of the [Community Health and Preventive Medicine Commons](http://escholarship.umassmed.edu/ssp), [International Public Health Commons](http://escholarship.umassmed.edu/ssp), [Life Sciences Commons](http://escholarship.umassmed.edu/ssp), and the [Medical Education Commons](http://escholarship.umassmed.edu/ssp)

Repository Citation

Butler, Elizabeth; O'Neil, Edward; Tabb, Zachary; Mwebe, Edward; Mukadde, John; Jim, Prossy; Godkin, Michael A.; Savageau, Judith A.; Ahmed, Safi; and Wolfe, Arwen, "Evaluating the Efficacy of Training Programs for Community Health Workers in Rural Uganda" (2012). University of Massachusetts Medical School. *Senior Scholars Program*. Paper 127.  
[http://escholarship.umassmed.edu/ssp/127](http://escholarship.umassmed.edu/ssp/127)
Evaluating the Efficacy of Training Programs for Community Health Workers in Rural Uganda

Authors
Elizabeth Butler, Edward O’Neil, Zachary Tabb, Edward Mwebe, John Mukadde, Prossy Jim, Michael A. Godkin, Judith A. Savageau, Safi Ahmed, and Arwen Wolfe

Comments
Medical student Elizabeth Butler participated in this study as part of the Senior Scholars research program at the University of Massachusetts Medical School.

This poster is available at eScholarship@UMMS: http://escholarship.umassmed.edu/ssp/127
• Background: The Ministry of Health and Omnimed, a non-profit U.S.-based organization that works with international communities to provide basic health education, have partnered to provide training to community health workers (henceforth referred to as village health workers or VHWs) in rural villages in Uganda. The training is provided via an intensive five-day long session that introduces a wide variety of themes in basic health education taught by experts in the respective fields. The participants are selected by the local government based on their age, reliability, level of education and availability. On the first day, the participants are given a pre-test that evaluates their level of knowledge about the subjects that will be taught during the training sessions, and are given the same questions in a post-test on the last day of training. This is done to evaluate how much information the participants learned about basic health during the training sessions. The participants are followed after this training by quarterly meetings, focus groups and further, more specific, training sessions. We analyzed data from the pre- and post-tests to evaluate the amount of information learned through the training sessions and we also evaluated feedback from the focus groups to determine how training through the program was affecting their community and to analyze the challenges facing the VHWs.

• Objectives: The objective of this project was two-fold: 1) to evaluate the amount of information about basic health retained by VHWs who participated in a week-long training session, and 2) to follow-up with VHWs to see what changes they notice in their communities and determine what challenges they face in disseminating health information to their villages.

• Methods: The study sample consisted of 110 participants who were asked to complete the pre- and post-tests. The pre- and post-training test consisted of 49 multiple choice questions, written in Luganda, with a total possible score of 105. The pre-test was distributed to the participants on the first day of the training session. A detailed grading of the tests was as follows: each correct answer received one point, incorrect answers received no points. We compared the percentage of correct answers of the pre- and post-tests to determine any changes in knowledge as a result of the training session. The question and the delivery of the exams were the same at both points in time. The grading of the tests was as follows: each correct answer received one point, incorrect answers received no points, and questions with more than one answer received no points. We computed the percentage of correct answers of the pre- and post-tests to determine any changes in knowledge as a result of the training session. A total of 96 females were recruited to participate in focus groups. Focus groups were conducted three and six months after the original training session and involved five to ten VHWs per session. Questionnaires were distributed to the groups and questions were read aloud with discussion about each topic. We asked the VHWs: 1) Have you noticed healthy changes in your community? 2) What changes have you noticed? 3) How does the community view a VWH? 4) What support could you use as a VWH?

• Results: The VHWs selected from the communities aged 25-40, were more likely to be female than male, and generally had a non-health-related occupation. One hundred and two participants completed both the pre- and post-tests. The average difference between test scores at the two points in time was an improvement of 20.25 points, or 19.2%. The range of differences between the scores was -5 to +61. Given that the VHWs were not previously educated about basic health, this was viewed as a marginal improvement. However, data from the focus groups indicates that the VHWs were making changes in their community. The participants in the focus group were aged 25-40 and 46 females and 56 were females. The focus groups demonstrated that 86% of the VHWs noticed positive changes in the community, including the creation of latrines (54%), more drying racks (58%), more hand-washing (11%), increased usage of boiled water (9%) and the newfound appreciation, indigent, etc.)? Have VHT Members noticed changes in community? 2) What challenges do VHT Members face? 3) What type of support would make the work easier? 4) What questions do the VHT Members have?

• Conclusion: The increased mean score of the post-tests indicates that the VHWs did learn basic health information during the training session. However, the improvement in test scores was not as impressive as one would expect given the intensive nature of the training and the baseline level of knowledge being somewhat low. The data from the focus groups, however, indicated that VHWs are creating positive change in their communities. This could mean that the simple act of appointing one person to educate their community imbues in them a responsibility to spread the knowledge that they have, however basic it may be. It could also indicate that the VHWs learned more at the training sessions than the test scores reveal. This project introduces the positive changes in the communities of the VHWs and their impact. The project also introduces a wide variety of advanced nature of the test questions, difficulty with multiple choice questions, or difficulty applying knowledge to the test, especially considering that many of the VHWs were adults many years out of school. In light of this information, one could consider a different method of evaluation, and focus more on the follow-up to assess what the VHWs are actually able to do in their communities. Moving forward, it would be ideal to evaluate the villages themselves via a system of door-to-door surveys that ask the villagers about changes they have or have not made and if they have seen any improvement in their health. This information will provide further evidence as to whether VHWs are an ideal model in the field of health education.