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

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Comments
Medical student Elizabeth Butler participated in this study as part of the Senior Scholars research program at the University of Massachusetts Medical School.
Evaluating the Efficacy of Training Programs for Community Health Workers in Rural Uganda

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Abstract

• 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 health training to community health workers throughout a series of intensive training sessions in 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 to evaluate their level of knowledge about the subjects that will be taught during the training session, and are given the same questions as 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. The participants are followed after this training by quarterly meetings, focus groups and further, 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 trainees thought 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 noticed in their communities and determine what challenges they face in disseminating health information in 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, scored in Luganda, with a total possible score of 98. The pre-test was distributed to the participants on the first day of the training session. Participants were administered post-tests on the last day of the training session. The questions and the delivery of the exams were the same at both points in time. The grading of the test 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. We compared the percentage of correct answers of 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 trainees thought the program was affecting their community and to analyze the challenges facing the VHWs.

• Results: The VHWs selected from the communities were aged 25-40, 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 difference 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, the data from the focus groups indicates that the VHWs were noticing changes in their community. The participants in the focus group were aged 25-40 and 44 males and 56 were females. The focus groups demonstrated that 86% of the VHWs noticed positive changes in the community, including the creation of latrines (34%), more drying racks (18%), more hand-washing (11%), increased usage of boiled water (9%) and the newfound creation and usage of tippy-taps (6%). When asked if the community viewed the VHWs as a positive asset, 87% answered yes. Lastly, when queried as to what support VHWs could use to facilitate their work, the majority answered some type of transportation (37%), while other popular answers were radios and tarpaulin, more training, cell phones or a stipend to compensate them for their work.

• 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 score was not as notable 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, indicate that VHWs are creating positive change in their communities. This could mean that the simple act of appointing one person to educate their community members is a responsibility to reveal the knowledge that they possess, however basic it may be. It also could indicate that the VHWs retained most of the training session than the test scores reveal. This is evidenced by the participants’ political and social knowledge, an advanced nature of the test questions, difficulty with multiple choice questions, or difficulty applying knowledge to the test, especially considering that most of the VHWs were adults many years out of school. In light of this information, one could consider a different method of evaluation, and move focus on the follow-up to examine what the VHWs are actually doing to their communities. Moving forward, this 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.

Background

Providers in public health have long since struggled to determine the best manner of disseminating information to communities. The idea of utilizing local members of the community to act as outreach health workers and educators has been tried by many and this study aims to evaluate the effectiveness of this type of intervention. Omnimed, in the midst of a large cohort study that will evaluate changes in health behavior and outcomes based on the presence of local community health workers.

Survey Questions

VHT Impressions:

1. Have VHT members noticed changes in community?
2. In which areas have VHT Members noticed changes?
3. How does the community view the VHT Members?
4. Does the community view VHT Members as HC1?
5. Do VHT Members view the community? 10)
6. What type of support would make the work easier?
7. What changes do VHT Members sense?
8. What questions do the VHT Members have?

Survey Results

What support do VHWs need?

- More Support
- More Training
- Mobiles
- Money
- Transport
- Cell phones
- No support

Do higher level HC view VHT Members as HC1s?

- Yes
- No
- No answer

How does the community view the VHT Members (e.g., appreciative, indifferent, etc.)?

- Appreciative
- Indifferent
- No answer

View the VHT Members as HC1s?

- Yes
- No
- No answer

Do VHT Members view the community?

- Yes
- No
- Unknown

Demographics

Gender of VHWs

- Male
- Female
- Unknown

Handwashing

- Yes
- No
- Unknown

Boiling Water

- Yes
- No
- Unknown

Tippy Taps

- Yes
- No
- Unknown

Drying Racks

- Yes
- No
- Unknown

Do you have a notice board?

- Yes
- No
- Unknown

Neighborhood

- Yes
- No
- Unknown

Education

- Yes
- No
- Unknown

Number of VHWs

- Yes
- No
- Unknown

Changes VHWs reported in their communities:

- More Support
- More Training
- Mobiles
- Money
- Transport
- Cell phones
- No support

Have you noticed changes in your community?

- Yes
- No
- Unknown

Activities

- Yes
- No
- Unknown

Money

- Yes
- No
- Unknown

Transport

- Yes
- No
- Unknown

Boiling Water

- Yes
- No
- Unknown

Tippy Taps

- Yes
- No
- Unknown

How does community view you as a VHT?

- Positive
- Negative
- Unknown

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