Implementation of WHO’s Community-Based First Aid Response (CFAR) Program in Southwestern Guatemala

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Introduction

Initial stabilization and expedient transfer of acutely ill-patients is a critical first step in delivering proper emergency care. This is a problem in many lower income class countries, where physical and financial constraints prevent citizens from accessing medical care in emergency situations.1 Medical emergencies are often first witnessed by community members. With the proper training, they can deliver life-saving interventions before a patient is transferred to a hospital. The WHO has recently created the Community First Aid Responder (CFAR) program, a 3-day training course that equips community members with such skills and knowledge to administer immediate medical care in these emergency situations.

CFAR has been implemented with success in various parts of sub-Saharan Africa, but never in a Spanish-speaking country. The remote and rural regions surrounding El Tofino, Guatemala was a promising location to pilot a Spanish version of CFAR.

Problem Statement

The WHO has deemed community training and education instrumental in managing emergency situations in austere settings.2 The graphic above shows the framework proposed by the WHO as an integrated multi-system approach to bolstering emergency care. Colored in red are the categories represented by CFAR.

CFAR has never been validated outside of the regions of sub-Saharan Africa. It is proposed as a standardized, open-access course endorsed by the WHO, but lacks robust external validity. Its effect on morbidity, mortality, and patient outcomes has never been studied.

Goals

Our goal was to implement CFAR for the first time in a Spanish speaking country in the Southwestern rural region of Guatemala. This site was chosen based upon a needs assessment performed by Dr. Kimberly Hill in 2014 highlighting the prioritized need of training its community members in delivering emergency care.

The priority was to create a sustainable, affordable, and effective model of CFAR which the local community can own, modify, and utilize to benefit its citizens.

Post-intervention observations would include the necessary context-appropriate challenges, challenges, and successes with implementation. All findings would be fed back to the WHO.

The important question was to what degree our qualitative observations and data collecting would reveal about the generalizability, feasibility, and appropriateness of CFAR in its broad application to various international settings outside of Africa.

Methods

The graphic above shows the model of CFAR ownership and delivery embraced by these communities. COLRED, an endorsed local branch of a national volunteer emergency response network act as the governing body that implements and manages CFAR in accordance with the needs and priorities of their communities.

COLRED interfaces with its international partners regarding technical support from abroad. It coordinates with the local bomberos to deliver CFAR to its community members. They will keep a record of CFAR trainees, continue providing feedback with each implementation, and overall manage the logistics of CFAR.

COLRED can be visualized in graphic B as the community members dressed in orange vests talking with the bomberos of La Blanca. A joint decision was made between these stakeholders regarding their respective roles pertaining to CFAR.

Post-intervention interviews, focus groups, and surveys with all local stakeholders revealed an overall positive reception towards CFAR. It also emphasized the importance of proper community ownership and support in maintaining the program.

Minimal concerns were made regarding the course material, but most doubt and questions revolved around logistical operations, financial support, and maximizing utility of CFAR given resource constraints.

Results

Graphic A shows the model of CFAR ownership and delivery embraced by these communities. COLRED, an endorsed local branch of a national volunteer emergency response network act as the governing body that implements and manages CFAR in accordance with the needs and priorities of their communities.

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Conclusion

Implementation and maintenance of a community-based prehospital system is a highly complex and multi-faceted task that must always remain community-centered.3 If CFAR is to be offered by the WHO as an open-access and standardized educational program, the authors recommend large additions to CFAR that inform best implementation practices. These may include an emphasis on robust needs assessments, consideration of local resources and technologies, encouraging data collection to inform rate and location of training delivery, etc.

Ultimately, such recommendations and updates should continually be informed by ongoing evidence and experience.

Future Directions

1. Further evolve and develop CFAR in the Southwestern rural region of Guatemala in collaboration with our local partners.
2. Augment and bolster other links in the “chain of survival” to better understand the impact of CFAR in the context of systemic emergency care delivery.
3. Consider context and resource appropriate models to measure quantitative outcomes of morbidity, mortality, or first-aid respond times.
4. Continue to feedback findings and suggestions to the WHO to expand and deepen the CFAR curriculum to allow for robust, generalizable, and ethically appropriate implementations in various international settings.

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References