

Master of Public Health

Master International de santé Publique

The Use of "The Epidemic Control for Volunteers (ECV) manual and toolkit:

The perceptions of Red Cross volunteers."

Mitiku Telilla Raga

MPH Year 2, 2010 - 2012

Location: International Federation of Red Cross and

Red Crescent Societies (IFRC), Geneva

Academic Advisor: Sandra B. Greene (DrPH), Senior Research fellow and co-director, Health care, UNC

Professional Advisor: Panu SAARISTO, MSc Disaster Health, Senior Officer, Emergency Health Coordinator,

IFRC

Dedication:

This thesis is dedicated to my father, Mr. Telilla Raga and My mother, Hanbise Wakjira; they brought me up with love and care, they have indeed shaped my life. My father was always pushing me to continue my education. I also dedicate this work to my sisters and my brother for their continued support and encouragement.

Declaration:

I hereby declare that the thesis entitled "The Use of "The Epidemic Control for Volunteers (ECV) manual and toolkit: The perceptions of Red Cross volunteers." has been carried out in the International Federation of Red Cross and Red Crescent Societies under the guidance of Prof. Sandra Green and Mr Panu SAARISTO. The work is original and has not been submitted in part or full by me for any degree or diploma at any other University. I further declare that the material obtained from other sources has been duly acknowledged in the thesis.

Mitiku Telilla Date: 09/06/20/2 Place: IFRC, Geneva

Table of contents:

Acl	knowl	edge	ements	
Lis	t of ta	bles		5
Acı	ronym	ıs		5
Ab	stract	- En	nglish	6
Ab	stract	– Fr	rench	7
1	Intro		ction and back ground	
	1.1 1.2	Ca Th	auses and types of epidemics ne spread of disease	9 10
	1.3	Еp	oidemic response cycle	10
	1.4	IFF	RC operational experience	11
	1.5	Tra	aining volunteers to better respond to epidemic	14
	1.6	Th	e IFRC's Epidemic Control For Volunteers (ECV)	14
	1.	6.1	Uniqueness of the toolkit	15
	1.6.2		Linkages between the ECV and other RC trainings	16
	1	.6.3	The toolkit includes three kinds of tools	16
	1	.6.4	The development process	17
	1	.6.5	The rollout process	
	1	.6.6	Nature of ECV training	17
	1	.6.7	Post training roles of volunteers	19
	1	.6.8	Practical implementation, ECV	19
2	The		al, objectives and research the questions	
	2.1 Significance of the stud		gnificance of the study	
	•		oal of the study	
	•		Specific objectives	
	2.4	Th	e questions it aims to answer	21
3	The	des	sign, methods and materials used	21
	3.1 Selectio		election of countries and interviewees	21
	3.2	Stu	udv design and tools	22

	3.3	Project Site Description	22
	3.4	Data source and collection	22
	3.5	Approval and ethical consideration	23
	3.6	Data analysis	23
	3.7	Reliability and validity	23
4	The	results obtained	24
	4.1	Trend of Epidemic and operations with ECV	24
	4.2	Demographic Characteristics of Respondents	24
	4.3	"The ECV manual - well received by the volunteers	26
	4.4	ECV - well received by the community	28
	4.5	Key challenges and weakness	29
	4.6	"Key areas of improvement"	31
5	Disc	cussion, conclusion and recommendation	33
	5.1	Discussion	33
	5.2	Limitations of the study	36
	5.3	Conclusion	36
	5.4	Key findings and areas for further study	37
6	Refe	erences	38
7	Δnn	0.000	10

Acknowledgement:

Above all, I want to thank and praise the loving God who gave me health and the strength through the path of my study years and also this research.

My utmost gratitude to my professional advisor, Mr. Panu SAARISTO, for helping me in developing the idea of this project and providing his support throughout the process of this research. My academic supervisor, Sandra B. Greene (DrPH), whose sincerity and academic support I will never forget. Dr. Sandra has been responding patiently to my questions and all related requests in the process of this study. I also thank Mr. William Carter, Senior officer for Emergency water and sanitation, IFRC, for his valuable support and encouragement to complete this study. I am very grateful to my wife, Anene Kebede, for shouldering extra responsibility so that I undertake and concentrate on my study. Last, but not least, I would like to

thank Dr.Adinoyi Ben Adeiza (IFRC Africa region), Nassima CHECK-ABDOULA (French Red Cross), and all other IFRC and National Society staff who took part in this study.

List of table and figures:

Table 1	Occurrence of Epidemic and utilization of ECV
Table 2	National Societies and volunteers trained on ECV, Africa
Table 3	Demographic Characteristics of respondents
Table 4	Respondents service period, # of operation and training days
Figure 1	IFRC general operations, 2006 - 2011
Figure 2	Distribution of epidemics in IFRC regions
Figure 3	Common epidemics and outbreaks
Figure 4	Epidemics, outbreaks and operations with ECV

Acronyms:

IFRC: International Federation of Red Cross and Red Crescent Societies

ECV: Epidemic control for volunteers

CBHFA: Community Based Health and First Aid

NS: National Societies

NDRT/RDRT: National/ Regional Disaster Response Team

NIT/ RIT: National/ Regional Intervention Team

RC: Red Cross/ Red Crescent

IMCI: Integrated Management of Childhood Illness

WHO: World Health Organization

LA & LC: Latin American and Latin Caribbean

ARCHI: African Red Cross Health Initiative

EH: Emergency Health

ERU: Emergency Response Units ZHCs: Zone Health Coordinators

MENA: Middle East And North Africa

MOH: Ministry OF Health

PHAST: Participatory Hygiene and Sanitation Transformation

HP: Hygiene Promotion

CCHF: Congo Hemorrhagic Fever

EV: Enterovirus

HEV: Hepatitis E virus

SARS: Severe Acute Respiratory Syndrome

IDP: Internally Displaced People

URCS: Ugandan Red Cross Societies

GRCS: Ghana Red Cross Society

ZRCS: Zimbabwe Red Cross Society

DREF: Disaster Response Emergency Fund

STI: Sexually Transmitted Infections
HIV: Human Immunodeficiency Virus

AIDS: Acquired Immune Deficiency Syndrome

Abstract - English:

Background: The Epidemic Control for Volunteers (ECV) manual and toolkit is an information and training package focusing on epidemic diseases and ways to mitigate them. It was conceived for use by volunteers and their trainers in Red Cross and Red Crescent Societies.

Objective: To aassess the overall perceptions of Red Cross volunteers on ECV manual and toolkit; assess gaps and challenges and propose ways of addressing them.

Design: Qualitative study using non-probabilistic, convenience sampling of Red Cross volunteers who were involved in using the ECV toolkit. IFRC African region and its 2 National Societies were selected; online telephone interview has been conducted using interview guide. A combination of *thematic content and Comparative Analysis* approach was used for data analysis.

Setting: IFRC Geneva, IFRC Zones and Red Cross National Societies were involved.

Participants: 8 Red Cross volunteers, 4 each from Ghana and Zimbabwe and the IFRC senior officer- Emergency Health coordinator were interviewed.

Main outcome measures: Responses of volunteers to the open ended questions (their perceptions), revision of the secondary data from background was also used to further explain the interview findings.

Results: The volunteers mentioned that the ECV manual and toolkit is important in preparing them to respond to epidemics; it provides them with key information they need. They also added that it is well received and appreciated by the community and other actors. According to the volunteers, its participatory and interactive nature makes ECV unique. Key challenges and weaknesses like lack of detail information, lack of reference materials, language problem, and transportation problem were mentioned. Despite areas for improvements, volunteers feel and suggest that ECV is worthwhile and the RC need to continue using it.

Conclusions: This study provides valuable data on the perception of Red Cross volunteers on the ECV toolkit. It can be used by Red Cross in addressing the gaps observed and improving its quality and future uptake. However, it is not exhaustive; it is a base for future further study on perception at different levels and the impact on beneficiaries in a broader view.

Abstract - French:

Contexte: le manuel «Contrôle des épidémies à l'usage des volontaires», qui est conjointement utilisé avec une trousse d'outils, est un module de formation axé sur les maladies épidémiques et les moyens de les limiter. Il a été conçu pour une utilisation par des volontaires et les formateurs de la Sociétés de la Croix-Rouge et du Croissant-rouge.

But: Pour évaluer la perception globale des volontaires de la Croix Rouge sur le manuel ainsi que la trousse d'outils; identifier les lacunes et les difficultés, et proposer des moyens d'y remédier.

Conception: une étude qualitative à été réalisée en utilisant une méthode d'échantillonnage non probabiliste, à savoir un échantillonnage de convenance qui consiste à choisir les volontaires de la Croix Rouge les plus disponibles. Ceux-ci ont été impliqués dans l'utilisation de la trousse d'outils. Deux Sociétés Nationales dans la région africaine de la FICR ont été sélectionnés; une enquête téléphonique et une enquête en ligne ont étés menées à l'aide du guide d'entrevue.

Paramètre: la FICR à Genève, les Zones de la FICR et les Sociétés Nationales de la Croixrouge ont été impliqués.

Participants: 8 volontaires de la Croix Rouge ainsi que l'officier supérieur et coordinateur des services de santé d'urgence de la FICR ont été interrogés. Sur les 8 volontaires, 4 viennent du Ghana et 4 du Zimbabwe.

Principales mesures des résultats: Les réponses de volontaires aux questions ouvertes (leurs perceptions). Une analyze des données secondaires a été également effectué pour expliquer plus en détail les résultats des entrevues.

Résultats: Les volontaires ont raporté que le manuel, ainsi que la trousse d'outils dont il est question, sont nécessaires pour se préparer et répondre aux épidémies. Ils leur fournissent des informations clés dont ils ont besoin. Les volontaires ont également ajouté que le manuel est bien reçu et apprécié par la communauté et d'autres acteurs. Selon les volontaires, la nature interactive et participative du programe de formation est très appréciée. Le manque d'informations détaillées ainsi que de matériaux de référence, des problèmes de langue, et problèmes de transportont été mentionnés comme étant des difficultés importantes. Malgré cela, les volontaires pensent que le manuel est utile et devrait continué à être utilisé.

Conclusions : Cette étude fournit des données précieuses sur la perception des volontaires sur le manuel «Contrôle des épidémies à l'usage des volontaires» et la trousse d'outils qui l'accompagne. L'étude peut être utilisé par la Croix-rouge pour combler les lacunes observées, améliorier la qualité et opimiser l'utilisation ultérieur de ce module. Bien qu'elle ne soit pas exhaustive, elle constitue la base de futurs études sur la perception à différents niveaux et son impact sur les bénéficiaires dans un point de vue plus large.

1 Introduction and back ground:

Infectious diseases still cause close to 14 million deaths every year. Respiratory infections account for four million deaths annually, with more than two million deaths for diarrhoeal diseases out of a total of 4.5 billion episodes estimated every year. Meningitis kills half of the people that are infected. This is more than 340,000 deaths annually. Nine million cases of dengue fever are also recorded every year and yet, this rarely hits the news. Meanwhile, neglected, emerging and re-emerging diseases affect approximately one in six of the world's population and more than 70 per cent of countries affected are low income or lower income countries (1).

"An epidemic is can be defined as "the occurrence in a community or region of cases of an illness, specified health behaviour, or other health-related events clearly in excess of normal expectancy; the community or region, and the time period in which cases occur, are specified precisely" (2). The definition does not specify a minimum number of cases. The area covered by an epidemic may be limited to a small area such as a school classroom, or it may extend to include many countries. Epidemics may also last from a few hours to many years (2). An epidemic occurs when the number of people in a community sick with a particular disease increases. More people become infected than in normal situations, exceeding the community's ability to cope. In other words, more people in the community are getting sick (or dying) than those who are getting better or recovering from the disease (2).

1.1 Causes and types of epidemics:

There are several changes that may occur in an infectious agent that may trigger an epidemic these include: increased virulence, Introduction into a novel setting, Changes in host, susceptibility to the infectious agent and Changes in host exposure to the infectious agent. Epidemics could be of common source or propagated outbreak. In a common source outbreak, the affected individuals had an exposure to a common agent. If the exposure is singular and all of the affected individuals develop the disease over a single exposure and incubation course, it can be termed a point source outbreak. In a propagated outbreak, the disease spreads personto-person. Affected individuals may become independent reservoirs leading to further exposures. Many epidemics will have characteristics of both common source and propagated outbreaks (2).

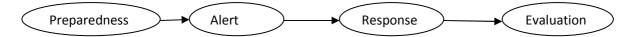
1.2 The spread of disease

An increase in the number and severity of natural disasters in the last decade has exacerbated this problem of epidemic diseases. Epidemics are a constant threat to the well-being of communities everywhere, especially in societies where resources are scarce. Managing epidemics, or preferably preventing them, is a priority for the International Federation of Red Cross and Red Crescent Societies (IFRC) (2).

Despite the considerable progress that African countries have made in epidemic detection, confirmation and response since the adoption of the African Regional Strategy for Epidemic Preparedness and Response in 1993, there remain significant challenges and gaps in epidemic-disease detection and response (3). All countries in the African Region have surveillance systems for communicable diseases. However, many of these systems do not have the capacity to function as early warning systems. Nor do all countries have the early response capacities needed to facilitate the rapid containment of epidemic-prone diseases (3). According to World Health Organization (WHO) regional office for Africa, there is an urgent need to implement a regional strategy to strengthen national and regional capacities and systems to identify, verify, notify and respond rapidly and effectively to epidemic-prone diseases and other public health emergencies of national and international concern. In addition, regional and sub-regional collaborative networks for surveillance and response, laboratory, infection control and zoonoses need to be strengthened (3).

1.3 Epidemic response cycle:

An epidemic response cycle can be described as a method used to understand an epidemic better in relation to time and to determine how to limit the harm it might do in the community. Epidemics tend to occur in cycles, not in a line (one after the other). When an epidemic occurs, the way it is handled and the actions that are taken to respond to it will affect how a future epidemic may go. In other words, if we respond well to an epidemic now, we are not only limiting the sickness and death during this one but may also be helping to limit the effects of future ones. (4). There are four main phases of an epidemic response cycle, regardless of what the epidemic is.



Preparedness constitutes of preparing for an epidemic in the period between epidemics. During this period, one could be able to learn, train and prepare equipment and volunteers for a possible epidemic (4). Alert is when epidemic is detected and mobilization of resources needed begun to respond to it. At this stage, some cases of the disease have appeared in the community, making it a strong possibility that there may be an epidemic soon (4). **Response** is the time to respond to an epidemic. When an epidemic is confirmed by the Ministry of Health or the district health authorities, we start our response (4). **Evaluation** is period of evaluating response to the epidemic after it is over. To look at what was done during the epidemic and think about what can be done better next time ((4).

1.4 IFRC operational experience:

The IFRC is the largest network in the world delivering humanitarian assistance to vulnerable people. With its 187 National Societies and 13 million active volunteers, the IFRC works within communities in disaster response and recovery, disaster preparedness and risk reduction, health and development. As community based responders, National Red Cross Society volunteers and staff are often the first on the scene of a disaster and to provide emergency assistance (5).

The IFRC mostly uses an Appeal or Disaster Response Emergency Fund (DREF) funding to respond to an emergency situations including epidemics. An **Emergency appeal** is a plan and budget that articulates how the Federation and the National Red Cross Society intend to respond where there are significant needs for which international assistance is required. **Disaster Response Emergency Fund (DREF)** is a fund of un-earmarked money that can be used to guarantee immediate financial support to the National Red Cross Societies in response to emergencies. Requests from National Societies are limited to CHF 1 million per allocation (5).

According to the Global statistics on the Red Cross Red Crescent response to epidemics, In March 2009, the IFRC's response operations jumped by about 30 per cent in fewer than three years. The data also showed that in 2007 and 2008, around 60 per cent of all requests submitted by National Red Cross and Red Crescent societies for allocations from the IFRC (DREF), were directly or indirectly related to outbreaks of acute diarrhoeal diseases (1).

Epidemics and disasters are occurring more often now than in the Stone Age due to several reasons. The disasters due to weather phenomena are increasing, and this mainly leads to the

increase of waterborne diseases. These can lead to epidemics of all kinds. Hence, the International Federation of the Red Cross and Red Crescent Societies continues to improve the way the organization responds to epidemics and disasters(4). Better monitoring and an increased capacity to respond is not an indicator that epidemic outbreaks are increasing at a similar rate, but these statistics still highlight the continuing burden of epidemic outbreaks especially in developing countries. (1).

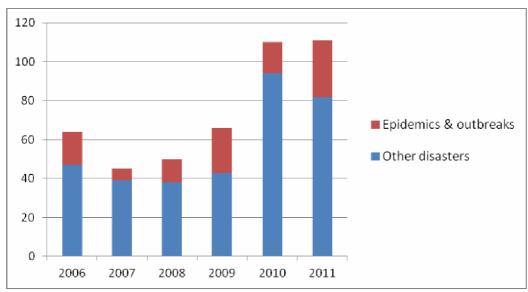


Figure 1. IFRC general operations, 2006 - 2011

Source: IFRC Appeal and DREF reports, 2006 - 2011

The above graph tells us that IFRC and NS have responded increasingly to outbreaks. Out of the 446 Appeals and DREFs reports, about 103 (24%) were epidemic and outbreaks of different causes. This indicates that of the operations of IFRC all over the world, epidemic and out breaks account for significant share compared to others disasters forms which justify the strategy focusing on the prevention and preparedness.

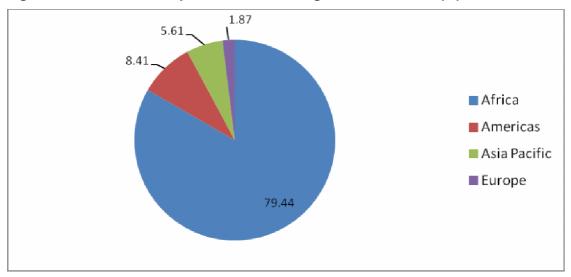
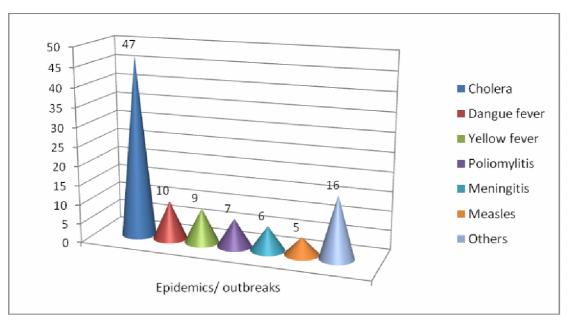


Figure 2. Distribution of epidemics in IFRC regions, 2006 - 2011 (%)

Source: IFRC Appeal and DREF reports, 2006 – 2011

The above graph shows that out of the 103 epidemic and outbreak cases that the IFRC responded to, 85 (79.44%) occurred in the African region followed by the Americas and Asia accounting for about 8.41% and 5.61% respectively. The Middle East AND North African region (MENA) was not mentioned in this graph as no data found in the report; this could be due to reporting problem or no operation specific to epidemics.

Figure 3. Common epidemics and outbreaks (%), 2006 - 2011



Source: IFRC Appeal and DREF reports, 2006 - 2011

According to the above graph showing common epidemics between the years 2006 to 2011, Cholera is the most common epidemic followed by Dengue fever and poliomyelitis accounting for 47%, 10% and 9% respectively. Most of these epidemics are occurring frequently in Africa and other developing nations. These epidemics listed in this graph are preventable in nature and can be a rationale for IFRC to design a tool to address them.

Having a purely emergency response approach in responding to epidemics is costly and will not stop them from happening again. Only long-term action addressing the roots of the problem can robustly improve the situation. It is essential to inform communities about risks and disseminate simple prevention messages that can save many lives. Working in partnership is also essential for all sectors to reach lasting results (1).

1.5 Training volunteers to better respond to epidemic:

Volunteers based at the community level carry out a large part of the international Red Cross and Red Crescent Movement's response. More than 13 million volunteers join the International Red Cross and Red Crescent Movement with no expectation of financial or material gain, delivering services to vulnerable people. When an emergency strikes, they perform first aid, rescue people from collapsed buildings, drive ambulances, brave flood waters, deliver letters to prisoners, conduct vaccination campaigns and provide comfort to those in need (6).

A large part of the International Red Cross and Red Crescent Movement response to epidemics is carried out by volunteers based in the community. However, research has shown that they frequently lack the initial background information necessary for a quick and efficient response to epidemics, especially when they are located in areas that do benefit from the support and guidance of health professionals. To help fill those gaps, the IFRC launched a training package "Epidemic control for volunteers", in harmonization with the community-based health and first aid in action (CBHFA) approach, involving volunteers more effectively in the management of epidemics. (6)

1.6 The IFRC's Epidemic Control For Volunteers (ECV):

The Epidemic Control for Volunteers (ECV) manual and toolkit is an information and training package focusing on epidemic diseases and ways to mitigate against their effects. It was conceived for use by volunteers and their trainers in local branches of Red Cross and Red Crescent Societies, to both familiarize them with the most common epidemics that cause the most death and suffering, and to teach them how they could help limit the number of victims, act quickly and effectively and define their role in their communities before, during and after an epidemic. (8).

The training manual and the accompanying toolkit consist of a handbook of simple guidelines and a folder containing loose-leaf printed fact sheets called "tools". The project's design, simple illustrations and basic production were all intended to make reproduction possible at National Society HQ and branch levels at very low cost, via photocopying or simple printing of the tools with very little sophisticated equipment required. The ECV materials were also designed to provide volunteers with a basic understanding of the diseases that can easily turn into epidemics, as well as suggest ways to mitigate against their effects (8).

1.6.1 Uniqueness of the toolkit:

The Epidemic Control for Volunteers (ECV) manual is symbolic of the commitment of the IFRC to respond better and faster to epidemics around the world. The IFRC wants to increase its efforts in the reduction of vulnerability to epidemics within the general population and some specific groups (4). This training package, in harmonization with the community-based health and first aid (CBHFA) approach, aims to fill this gap by involving volunteers more effectively in the management of epidemics. The training encourages the volunteers to use evidence-based

actions and approaches to prevent the spread of communicable diseases in their communities, provide appropriate care for the sick and reduce the number of deaths(4).

The epidemic control toolkit helps volunteers to know more specific information about the disease that we are about to deal with, including: how it is transmitted; how to prevent and manage it. Since they are dealing with an epidemic of a specific disease, they will need to know what specific actions to take. They will also need to have specific messages about that disease ready to deliver to community members so that they can protect themselves and reduce the negative effects of the epidemic on their lives and health (4).

1.6.2 Linkages between the ECV and other RC trainings:

The ECV package can be used as one component of the broader CBHFA package, building more details onto what is only briefly mentioned in related CBHFA modules on the subject of epidemic control. The focus for the training of the ECV is targeted by many NSs onto their existing CBHFA volunteer cadre, reinforcing the community health messaging. The materials are also designed to be complementary to other standardized IFRC and NS tools and methodologies (CBHFA, the community health education module from the "Better to be Ready" modules, health in emergencies training for the NDRTs/NITs and other global RC tools, as well as others such as WHO's Integrated Management of Childhood Illnesses (IMCI) (8)

1.6.3 The toolkit includes three kinds of tools:

Disease tools are the RED cards in the kit, and they describe the diseases that can cause epidemics. 17 separate one-page tools each include a definition, simple symptoms, prevention and epidemic management of a single disease; there is one sheet per disease so users can select the specific tools they need for any particular operation and do not have to carry the whole toolkit with them at all times. (9). Action tools are the BLUE cards in the kit, and they describe actions that need to be done in epidemics. 35 separate one-page tools each include one action that should be done in relation to the relevant disease; Each action tool tells us about one specific action that needs to be taken to help control an epidemic of a certain disease(10). Community message tools: Those are the BIGGER cards with BIG drawings on them. 25 illustration-based pages each including a ready-to-use illustration and one single message to the community. These can be distributed as fliers, hung as posters, or used in community gatherings if prepared in advance (11).

1.6.4 The development process:

Staff from the Emergency Health Unit of the Health Department at the IFRC Secretariat conceived and developed the materials as a *response* tool during 2008 and a draft was field tested in Nigeria with the Red Cross branches and volunteers, with various amendments made. The participants were made up of two-folds. Those who are volunteers with many years of experience and those who are very new within the Red Cross movement. The reason was to have a balanced and constructive testing and feedback of the manual (6).

An outbreak of cholera in Zimbabwe in late 2008 gave the Emergency Health Unit the opportunity to properly use the package for the first time. Working with the Zimbabwe Red Cross volunteers - who were in turn supporting the country's National Health Service staff in the cholera campaign - the first 'training of trainers' workshop was held in April 2009 just as the specialized emergency response units (ERUs) were leaving the country. A ten-page Facilitator's Guide was also developed at this stage (6). The initial writing and line illustrations was done; translation and layout to French, Spanish, Arabic and several other languages then followed (6).

1.6.5 The rollout process:

The IFRC then launched the package, in harmonization with the CBHFA approach, with initial support to Malawi, Uganda and Gabon in response to specific disease outbreaks. The rollout evaluation conducted in 2010 has indicated that the rollout of the materials and toolkit was generally considered to have been under-planned and under-resourced. The health department in Geneva dispatched the material to the various Zone Health Coordinators (ZHCs), and discussed its use individually with them. It was then left to the ZHCs to ensure it reached the various NSs or delegates in each Zone (4).

The introduction of the ECV toolkit and manual in Africa was started via the original field testing, and then later in response to actual disease outbreaks in a number of countries. Some work had already been done in several countries in preparation for an anticipated influenza pandemic, and there was residual understanding and skills at volunteer level in several NSs. The introduction and use of the ECV toolkits aimed to build on this and other knowledge built up by the volunteers who had been implementing the African Red Cross Health Initiative (ARCHI) and CBHFA programmes of recent years (4).

1.6.6 Nature of ECV training:

A typical training includes 16-24 participants and 2 facilitators. The training includes classroom instruction, group work, role-play and hands-on use of the manual's accompanying toolkit. Participants will read the *Volunteer's Manual on epidemic control* and perform the workshop activities. Trainers will use the *Facilitator's guide* to conduct the workshop (13). Training costs varies from country to country; one complete training session for a group of participants (16 – 24) incorporates costs of perdiem, accommodation, transport and other unforeseen expenses (source – Ghana RC).

The selection process for choosing participants for the ECV training is straightforward. No previous knowledge on the subject is required to succeed; facilitators should collect registration forms from all interested volunteers and attempt to accommodate all applicants. Should there be an exceedingly high number of applicants; facilitators should plan to hold multiple training workshops (13). Up-to-date contact information of all participants who complete the training is kept; facilitator's send a copy of the registration forms for each training to the respective National Society. This helps to contact the volunteers quickly if an epidemic occurs (13)

Table 1. Occurrence of Epidemic and utilization of ECV. 2010 - 2011:

	-			Volunteers trained
Year	Total operations	# of Epidemics	Used ECV	on ECV
2011	114	29	17	4,165
2010	135	17	6	2,015
Total	249	46	23	6,180

Source: IFRC Appeal and DREF reports, 2010 – 2011

In the above table, since the utilization of ECV was started from the year 2009 onwards, the data on the number of volunteers trained on ECV and operations with ECV are found in the operations conducted from 2010 and onwards. Out of the 46 epidemic cases occurred between 2010 and 2011, ECV has been utilized in 23 (37.5%) of the cases. A total of **6,180** Red Cross volunteers were also trained on the ECV during that time frame.

Table 2. National Societies and volunteers trained on ECV, Africa

Year	Region	Country	Operation type	Appeal/ DREF	Volunteers trained on ECV
2011	West Coast	Ghana	Meningitis	DREF	220
2011	West Coast	Nigeria	Lassa Fever Outbreak	DREF	300
2011	Eastern Africa	Uganda	Cholera	DREF	60

2011	Central Africa	Cameroon	Cholera Outbreak	Appeal	600
2011	Central Africa	CAR	Cholera Outbreak	DREF	500
2011	Central Africa	DRC	Measles Outbreak	DREF	150
2011	Country	Ethiopia	population Movement	Appeal	100
2011	Country	Zimbabwe	Cholera	NS funding	100
2011	Southern Africa	Malawi	Floods/cholera	DREF	100
2011	Southern Africa	Mozambique	Floods/cholera	DREF	800
2011	Southern Africa	Malawi	Floods/cholera	DREF	100
2011	West Coast	Ghana	Flood operation	DREF	100
2011	West Coast	Nigeria	Cholera Outbreak	DREF	150
2011	West Coast	Chad	Cholera	DREF	10
2011	West Coast	Senegal	Yellow Fever	DREF	110
2011	West Coast	Cote d'Ivoire	Yellow fever	DREF	180
2011	West Coast	Cameroon	Polio	DREF	300
2011	West Coast	DRC	Cholera Outbreak	DREF	150
2010	Southern Africa	South Africa	RVF	DREF	160
2010	Southern Africa	Zambia	Cholera	DREF	200
2010	West Coast	Cote d'Ivoire	Meningitis Out break	DREF	601
Total	·		·	<u> </u>	4,991

Source: IFRC Africa regional office

In the above table, we find a total of 4,991 volunteers trained on ECV to respond to different epidemics and outbreaks in the year 2010 and 2011.

1.6.7 Post training roles of volunteers:

Volunteers play a useful role in hygiene promotion at the community and household levels, they can encourage people to change their behavior and adopt safe hygiene practices on the personal and domestic levels. They can also be involved in teaching mothers about oral rehydration and in advising parents to take very sick children to health facilities. Volunteers can play an important role during a many epidemic cases. They help detecting new cases, referring cases, put up posters and distribute leaflets with dos and don'ts, show mothers and caregivers how to prepare local food / remedies and alert the health authorities (4).

1.6.8 Practical implementation, ECV:

In late April 2010, **Tajikistan** reported over 120 cases – including 10 paediatric deaths - of acute flaccid paralysis in 20 districts of the country. The Red Crescent Society of Tajikistan (RCST), gave ECV based training, deployed its volunteers and medical instructors to conduct house-to-

house surveys to gather information on the number of cases from each district on behalf of the state's health facilities (4). In **Afghanistan**, in 2010, the health delegate designed a seven day training programme based on ECV and a suspected cholera outbreak. The agenda expands on the basic three day ECV schedule and included practical field exercises and a wider exploration of factors around epidemic control, assisted by a variety of resources already available to the Afghan Red Crescent. Over 25 volunteers attended the training (4). In **Cote d'Ivoire**, in collaboration with the district health authorities, the Red Cross identified and selected 320 community volunteers and trained them on community sensitization using ECV with focus on change of attitude towards vaccination against epidemics including yellow fever. Personnel from the National Institute for Public Health supported the Red Cross in training its volunteers. [Cote d'Ivoire/West Coast: Yellow Fever Outbreak, IFRC, November 2011].

In Somalia, The IFRC health team has conducted training on Epidemic control for volunteers in Somaliland and Puntland to enable SRCS health teams and community health committees to reach more rural communities and IDPs. Volunteers and the team carried out health promotion campaigns within the drought affected population focusing on Health promotion using CBHFA, ECV and PHAST tools. [Emergency appeal operation updates Somalia: Drought, October 2011] In Uganda, URCS mobilized resources through the IFRC's DREF allocation fund that facilitated the mobilization and training of 590 community-based volunteers on the ECV toolkit, which reached an estimated 10,000 households in 295 villages in Agago district. [Uganda: Cholera Outbreak in Mbale District, March 2012]

2 The Goal, objectives and research the questions:

2.1 Significance of the study:

This study aims to assess the perceptions of Red Cross volunteers on their preparedness to respond to epidemic and outbreaks once they are trained on the ECV toolkits. It helps to understand how the toolkit is perceived by the volunteers using it, and to identify any potential challenges and gaps that need to be addressed and improved in the future use of the tool kit. This study looks at these issues from different angles and is commissioned by the IFRC's Health Department, to further ensure and consider the use of the ECV Manual and Toolkit in National Societies' and the IFRC's operations" all over the world.

2.2 Goal of the study:

The goal of this study is to contribute to improving the strategic response to epidemics and outbreaks through building knowledge about the skills of volunteers using ECV toolkit.

2.3 Specific objectives:

- Gather and analyze the perceptions of Red Cross volunteers on ECV and its intended objectives.
- Assess and recommend ways of improving their knowledge and skills through using the manual.
- Identify gaps, challenges and weaknesses observed in the process of implementation and propose ways of addressing them.

2.4 The questions it aims to answer:

- How do Red Cross volunteers perceive the ECV and its use on community level?
- How do RC volunteers perceive their own level of preparedness to respond to epidemics and outbreaks with the ECV toolkit (or "after the ECV training")?
- What are the strengths, weaknesses and challenges observed in the ECV toolkit utilization;
 and how to address the challenges?

3 The design, methods and materials used:

3.1 Selection of countries and interviewees:

"Non probabilistic sampling, convenience method" was used to select the specific region, National Societies/ countries and participants/ volunteers to be interviewed; this due to the location of national societies from Geneva, ease of online communication, language issue, and time constraint. Two countries/ national societies of the IFRC African zone, Ghana and Zimbabwe Red Cross Societies were selected for interview. Formal communication has been made from Geneva IFRC Health department with the IFRC African zone and to the national societies through the region for their approval and support through in the process. The communications and clarification of the study objectives has been done using e-mail and telephone from the IFRC health department in Geneva.

Letter (e-mail) has been sent to the region and national societies to select Red Cross volunteers who were involved in using the ECV tool kit regardless of age, sex and educational status; preference was given to those who could easily be accessed on telephone for interview. A total of eight participants, four volunteers from each country were selected through the national societies and we received their detail contact address through e-mail. The IFRC Senior officer,

Emergency Health coordinator, who has been involved from the development of the tool till today, was also interviewed for the view from the federation side.

3.2 Study design and tools:

The study design is a mixed method, with a quantitative and qualitative component. The quantitative portion includes secondary data from the IFRC secretariat. This includes numbers on the overall disasters, Epidemic, outbreak, use of ECV and volunteers trained on ECV were assessed in the back ground and context. The qualitative portion of the study is key informant interviews with volunteers in two countries using the ECV. An interview guide was used to interview the volunteers' perception of the ECV tool kit. An iPod was used to record the telephone interview at the spot; note book and pen has also been used to take short note so as to complement with the recording. Arrangement for the interview has been done by the IFRC health department in communication with all official channels of IFRC and the national societies.

3.3 Project Site Description

The site of the study has been the IFRC secretariat in Geneva and the two African National societies, Ghana and Zimbabwe Red Cross societies where ECV has been implemented and utilized in response to many epidemics and outbreaks.

3.4 Data source and collection:

The secondary data are mainly gathered from the Emergency Appeals and DREFs reports on emergency health available in the agency's website. During the internship, the researcher was involved in creating the data base of these reports and later used it for writing thesis. Other emergency health publication, reports available at the IFRC office in soft copy or hard copy and some data received from African zone were also utilized. Data on the general perceptions of volunteers were collected from the live interview conducted on telephone from the two African countries, Ghana and Zimbabwe.

Online telephone interview has been conducted for each of the eight volunteers in these countries; the interviews were tape-recorded in order not to miss any information and to ensure accuracy, and later typed on computer. An iPod was used to record the voice during the telephone interview, a short note has also been taken by hand while interviewing to be able to capture as much information as possible and to avoid limitations which may arise due to disruption of the recording system. The IFRC's senior officer, Emergency Health Coordinator

was also interviewed for his view on the past, current and futurity of the ECV manual and toolkit from the Federation side.

3.5 Approval and ethical consideration:

This study has been approved by all concerned staff and delegates of the IFRC secretariat, and zonal offices; focal personals at the national societies of each country have also approve and supported in the process. Consent format has been developed and sent to Ghana and Zimbabwe Red Cross national societies for the volunteers signature and agreement to participate. A detail explanation concerning confidentiality, anonymity, voluntarily participation, the recording process and providing feedback (result) has been done for each participant before the technical interview. The content of the interview guide were also checked and rechecked for sensitive and personal issues in consultation with my academic and professional advisers. All accepted to participate and none of the volunteers asked to withdraw.

3.6 Data analysis:

For the data analysis, a *thematic content Analysis* approach was chosen (20). The interview guide questions were open ended which resulted in the volunteers freely expressing their opinions and perceptions on the ECV toolkit. Themes emerged from the transcripts through comparison of ideas and perception between individuals and volunteers of different countries. The researcher has made repeated listening of voice memo, reading and rereading of notes and continuous revision of the secondary data until no critical new issues are arising.

All the data were thoroughly examined to identify themes and label them as categories as they emerge. We also used quotes to illustrate examples of those themes from the text. We were able to start analyzing immediately after each interview; the background reading has also helped as part of the analysis in explaining the emerging theme. Table and graphs were used to present the demographic characteristics of the interview participants; flow charts were used to locate the themes and subthemes. Each major category or 'theme' was described. Example: how did the volunteers talk about the aspect? The findings from the key informants were also triangulated with the information found in other secondary data and IFRC staff and other literatures.

3.7 Reliability and validity:

Reliability and validity of the study has been established and assured through designing and adhering to proper analytic procedure or a grouping scheme to increase trustworthiness. Careful description of the type of approach to the analysis has strengthened the method. We have read and re-read the entire data set to ascertain whether the themes 'work' in relation to the data set and to code any additional data within themes that has been missed in earlier coding stages; the whole corpus of collected data has been thoroughly analysed.

4 The results obtained:

4.1 Trend of Epidemic and operations with using ECV:

The secondary data from DREF and Emergency Appeal reports indicates that the numbers of IFRC operations on epidemic and outbreaks are increasing from time to time and so does the use of ECV to respond to the epidemic. For example, looking at the available epidemic secondary data of 2010 and 2011, there is an increasing trend for epidemics and out breaks of IFRC operations.

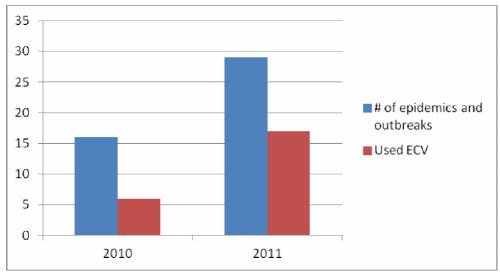


Figure 4. Epidemics and out breaks and operations with $\ensuremath{\mathsf{ECV}}$

Source: IFRC Appeal and DREF reports, 2010 – 2011

4.2 Demographic Characteristics and background of Respondents:

All respondents from Ghana and Zimbabwe, who were interviewed on telephone, responded to the questions about their perceptions of the ECV toolkit and beneficiaries feeling.

Table 3. Demographic Characteristics of respondents:

Organization	Total	Mean age of	Education	
	Respondents	respondents	High school	College +
GRCS	4	28.5	2	2
ZRCS	4	29	3	1
IFRC	1	Senior officer, I	Emergency healt	h coordinator
Total	9			

The demographic characteristics of the volunteers from both countries, Ghana and Zimbabwe, are similar. In Ghana, all respondents were males while there were 3 males and one female In Zimbabwe. Mean age of respondent volunteer was 28.5 in Ghana and 29 in Zimbabwe.

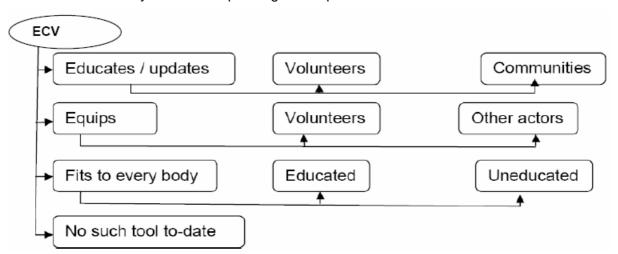
Table 4. Respondents service period, # of operation and training days:

Organization	Volunteer	ECV experience	Operations	Length of initial training
	code		(Epidemics and	
			other cross cutting)	
GRCS	G01	3 years	4	3 days
GRCS	G02	6 months	2+	10 days
GRCS	G03	6 months	2	7 days
GRCS	G04	3 years	2	4 days+
ZRCS	Z05	3 Years	3+	10 days
ZRCS	Z06	3 years	3+	10 days
ZRCS	Z07	3 years	3	10 days
ZRCS	Z08	3 years	2+	10 days

Six of the responded volunteers, have experience of working with ECV for about 3 years while the rest 2 have 6 months experience. Similarly, 4 volunteers have participated in 3 or more epidemic and other cross cutting operations while the rest 4 have participated in 2 or more operations. 4 volunteers said that they have got 10 days initial training while the rest 4 mentioned of attending between 3 days and 7 days; and almost all mentioned of getting some kinds of refresher training after the initial trainings.

Four major "themes" emerged from this qualitative interview data; subthemes were explained under each major theme.

4.3 "The ECV toolkit is well received by the volunteers; it provides them with key information they need for responding to an epidemic."



The responses collected from the volunteers indicate that the ECV manual and toolkit is needed because it either provides first hand information or updates both volunteers and the targeted community members. For example, they mentioned that the community members reached by the ECV toolkit now do know how to protect themselves from mosquito bite; they also said that it has been very effective in making make people understand the importance of hygiene for their own and families. At the same time, the volunteers say that they are always ready to act whenever epidemic happens and also prepared to alert the community using the tool in a regular health information program. It goes even much beyond educating, helps in equipping the volunteers and other health actors with clear and easy to do knowledge and skills required to respond to epidemics and outbreaks.

The volunteers mentioned, though there have been other tools delivered by different agencies, ECV manual and toolkit is different as it fits to those educated or uneducated. One volunteer said, "The ECV provides me with a lot of information and prepares me for the time would be among the community". Those uneducated can even look at the pictures and easily understand its illustrations. They added that they need it as they were missing such very practical informative materials and as such the community lacks knowledge on the diseases. It has been worth and helpful in that it is very participatory, interactive and practical. Majority of the

volunteers mention that the ECV is highly needed and utilized during the occurrence of epidemic, but they all pointed out that ECV has also been used as a cross cutting tool for many community health campaigns, before or after the occurrence of epidemics. Volunteers also mentioned that they have used ECV in informing people about malaria, HIV and hygiene promotion.

Volunteers feel ECV has served its purpose:

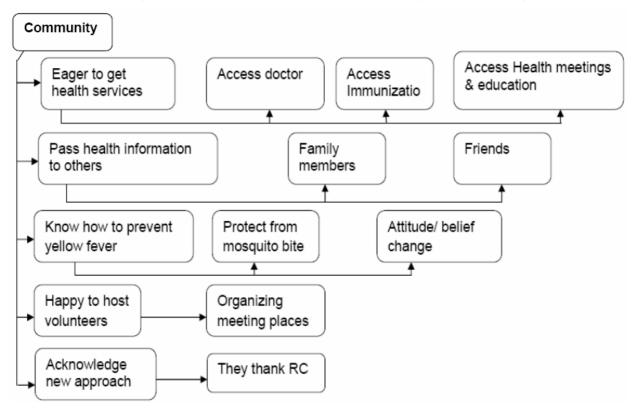
Almost all of the interviewed volunteers feel that ECV toolkit has served its purpose in preparing the volunteers to educating the community through delivering clear health messages.

For example, they say, "many people in our community were not aware of yellow fever before; they now have more information on the disease and its prevention". The volunteers also mention their own example, it helped them understand many things they did not know before and built their confidence to help the community. Some said, "Despite lack of detail information to respond to challenging questions, the tool is quite important.

Resources and material during implementation of ECV:

The volunteers mentioned that they need some resources or materials including means of transportation, finance to cover the cost of stationeries, ECV related materials and some posters. One of the volunteers said, "We need respected people who are loved and accepted by the society to guide as in the community; for example, to go with administrative officials helps to get things on board". They all mention that they badly need different posters, leaflets and small handbook materials as a reference for themselves and community, but it is not yet fulfilled. The need for transportation is mentioned specifically in combination with the area to be covered; saying there are a large areas to be covered with limited transport. Some respondents also mentioned that they need audio-visual materials to show kind if educative films to the communities, to support the ECV.

4.4 Volunteers say ECV is well received and appreciated by the community:



Volunteers mentioned that there are community members who are thanking the Red Cross and appreciating for this new participatory type education. They added that people have great interest to attend health information sessions as they have seen the result of the tool in their own life. According to the volunteers, the communities are aware about preventing mosquito bite and their attitude and way of thinking has been changed. For example, one volunteer mentioned of hearing community member saying, "Before I was thinking that vaccines were made from Monkey's blood but now I have the true understanding of it".

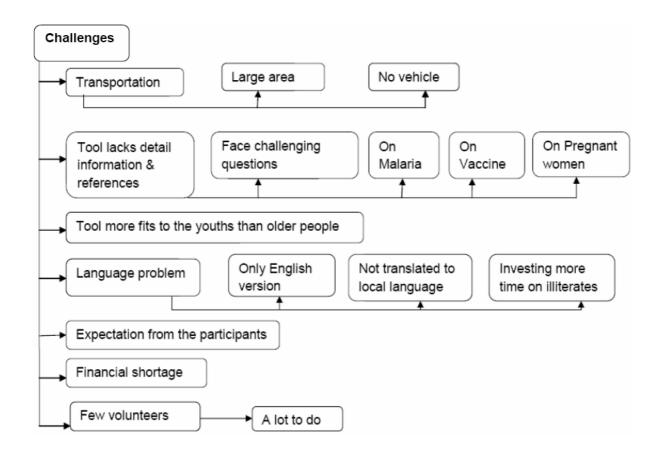
The volunteers also mentioned that they have observed more people coming to immunization program, visit doctors, they have interest to know more about the diseases, they attend sessions without any hesitations. They also added that the people are eager to come again and

again, happy to host the volunteers to the extent of helping in organizing meeting for health meetings and training sessions. Another point mentioned was that people are happy to share the information they have heard at the sessions with their families and friends; the informal discussion continuous even after the health information session. Some volunteers also mentioned that other health workers are appreciating it.

Uniqueness and strength of ECV:

Almost all interviewed volunteers mentioned similar points as strengths of the tool. Some said that the tool came at the right time when the community needs it. One volunteer said "It makes me proud, we are a using an organized handout and going out to the community in our uniform with the kit, it makes the work unique". They also pointed that it can be implemented in any community with different approach; has simple and understandable pictures grouped in a clear way, not solid theory but very practical and informative. They said that the pictures are easy to understand interpreted by any person whether educated or uneducated. Respondents have also mentioned that ECV is very participatory, triggers debate or discussion, volunteers are just leading but the people discuss on the issue and even suggest solutions; it is interactive, simple, breaks silence and addresses a lot of cross cutting health issues.

4.5 Key challenges and weakness: include lack of detail information, language problem, transportation problem and volunteer few in number.



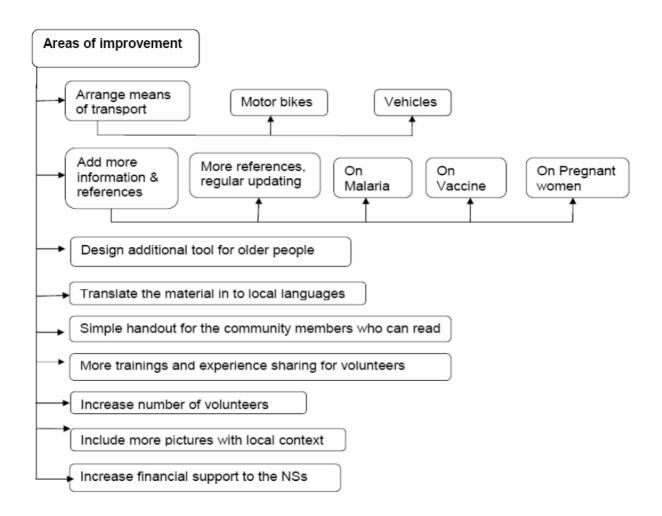
According to the volunteers, some challenges and weaknesses around the tool includes lack of detail information (content) in the toolkit, no additional posters and pictures compared to the need they have observed, and language problem as the material is not yet translated to their own local language.

Many of the interviewed volunteers, complained about absence of detail information in the tool kit; for example, they mentioned that they need more information on Malaria, mosquitoes, vaccines and pregnant women. They sometimes face a challenging question around these topics from the community and were not able to respond. For example, questions like "in case you were already infected by the disease, would the vaccine work? And the tool has no detail on this". There is no additional materials or reference materials to be displayed at the community centers and easily be read by the literate people, they stress that this helps a lot. They also stressed that much of the information need to be accompanied with pictures as it is a simple tested way of getting the community onboard. The bigger challenge mentioned from both countries was about the language, the toolkit is currently in English version and they always

found it difficult and investing too much time with the community to translate orally. But if it is translated in to the local language, they say it would be easier to explain and also for the community to understand, those literate ones can easily read and understand by themselves. In both countries, they want the version to their own local languages spoken by the community. One volunteer said that the tool best fits to the youths and not easy to be used for older people.

The volunteers also mentioned problem of transportation; they have large remote areas to be covered but difficult to reach every corner. And, they mention saying "ECV should not be limited to the town people but need to reach all with similar need". Some volunteers also mentioned that the current number of volunteers is very few compared to the need to reach many people at the same time. Some also said that implementing new approach and new tool by itself has been a challenge until we get used to it. People are normally not open at the very beginning and gradually start to develop acceptance to new thing and new materials and this is what has happened. Some mentioned the problem with culture and religion. For example, some religions do not support immunization and use of condoms; they say that God can protect them from everything. Similarly, discussing issues of sexually transmitted infections (STI) and HIV/ AIDS has never been easy due to the cultural resistance and taboos.

4.6 "**Key areas of improvement**": include more detailed content, more pictures, translations to local languages and improved means of transportation.



Almost all of the points mentioned as areas of improvement are linked to the challenges around the toolkit and the environment in which it is implemented. Improving the means of transportation through providing motorbikes was mentioned to address the transportation related challenges. Increasing financial support to the national societies, increasing number of ECV volunteers also helps to reach many areas and community members at the same time. The need for refresher trainings and experience sharing for volunteers. They wanted to get regular refresher training including experience sharing with others in and outside the country to update and build their skills. The volunteers want to be motivated from time to time to be effective and fully committed to work for the success of the toolkit and improvement of health of their community; they mentioned even to the extent of upgrading their education. They mention that they want to be ready all the time, not only when something happens.

Concerning the ECV toolkit, they want the necessary and important information to be detailed; for example, on Malaria, mosquito, immunizations, pregnant women and the like. They also

suggest additional back up reference material to be displayed in the office and also at the community level, including simple summary handout to be referred by those who can read, especially for office people who are busy and have no time to attend health awareness sessions. Concerning the language, they all have voiced that the material need to be translated in to the local language and that saves much time for them in explaining to the people. They also said that they want more pictures, posters and leaflets to be displayed in public sites. One volunteer mentioned that the designing of additional tool for older people is important as the current one mainly fits to the youths. The volunteers are asking to get very intensive training on the whole and full content of the toolkit, not part by part. They have also added the importance of preparing audio visual health information materials to support the other methods and also to attract people.

The volunteers suggest that the activities in the toolkit are worthwhile and the Red Cross need to continue using them. They mentioned that nothing is irrelevant; only one volunteer mentioned that Ebola information is not relevant.

5 Discussion, conclusion and recommendation:

5.1 Discussion:

The volunteers who were interviewed showed an interest and willingness to provide their perception and views around the ECV manual and toolkit, which were assessed using the thematic content analysis. This study provides a list of points perceived by the volunteers as strength, weakness, challenges and things to be improved in the future and can be a base for future further studies, evaluation and improvement of the tool. Second, this study provides evidence that volunteers and other actors are using ECV based approach in response and management of epidemic and outbreaks, and related decision making processes. In other words, volunteers are moving from depending on health information material produced ad hoc and merely replicated mechanically in the communities to having their own common platform for epidemic response. Their actions are more predictable, it is possible to assure the quality in their health information activities and they are ready for the common epidemic and outbreak scenarios in their local communities.

The original objective of the ECV toolkit, which is to prepare the volunteers to respond to epidemic has been well echoed and well received by the volunteers themselves. The interviewed volunteers were able to go further and explain its benefit in educating the community. Whilst the main aim of this study is to assess the perception of volunteers around

the toolkit, the volunteers mentioned important points related to volunteering, interaction with the community and architecture of the toolkit, all three points being interlinked. The toolkit equips the volunteers with the knowledge and skill required to respond to epidemics and outbreaks, and the volunteers reach out to the community using the toolkit. This somehow indicates that the gaps in the toolkit are indirectly gaps in the volunteers which may be reflected at the grass root level in the community. For example, when there is lack of detailed information in the toolkit, then the volunteer miss an element to be taken out to the community and the community may miss some of the information it supposed to get. The volunteers may also need a continuous coaching and support during implementation of epidemic control activities in the field as the manual alone cannot respond to all possible questions that may arise. The coaching may also help to find innovative solutions if difficult questions arise; such as engaging community members in the search for more knowledge.

In the long run, the package to improve the toolkit needs to contain elements that may have direct or indirect impact in the process of using the toolkit. So, the idea of regular updating and preparation of reference material is important to the required level; because volunteers are expected to deliver simple and short messages to the community and they can still refer any difficult issue or questions to their supervisor or other health personal /health worker near to them. For the volunteers, it is good to have necessary knowledge for them but they don't have to answer every question by themselves; it is advisable to let the community discuss, since sometimes answers can be found from the community themselves. Thus, over all, the volunteers seem convinced that ECV is the right tool, with right objectives and came at the right time to help the community through preparing them.

Almost all volunteers mentioned that the ECV toolkit is very participatory, it triggers discussion and debate, and the people have a lot to share more ideas from their side than the volunteers talking to them. It helps the community to talk out what they think around the issue, and the role of the volunteer seems to be there and guide the discussion. According to the SARAR (Selfesteem, Associative strengths, Resourcefulness, Action-planning, and Responsibility) based methodology, which was created by Columbia University professor Lyra Srinivansan during the 1980s, participatory methods help the community become involved in their own health

development (12). Though ECV is not based on SARAR, the participatory nature of it is important in empowering the community in finding local solutions to their problem.

The language problem was stressed by the volunteers and seems to be a very relevant complaint as they have supported with practical examples of challenges faced on the ground. The volunteers are investing more time with the people in translating the language from English in to other local languages spoken by the community. From my own experience of working with community, at the spot oral translation not only consumes time, but also affects the original meaning of the message it wants to pass to the community. Similarly, people feel comfortable when they are approached by using their own language instead of new and external one. So, the national societies may look in to the options on how to get the material translated in to local languages.

The transportation and financial problems raised by the volunteers is relevant point, but the solution may need a broad strategy. Because, ECV is not a project, it is just a manual and toolkit which can be utilized in any Epidemic or outbreak project which is designed to include ECV in their outreach and it can also be used in combination with other types of trainings. In addition, volunteers are also trained from their own locality to serve their own people but not travel long distance unless require by the national societies.

The fact that the volunteers repeatedly stressed the importance for the Red Cross to continue to use the ECV manual and toolkit reflects their own practical experience after using it with the community on the ground, quite perceived by all as of paramount importance to address the problem of epidemic and outbreaks. Few volunteers felt that the topic "Ebola" is not relevant to their country but this comment may need additional verification from other health workers and concerned people.

Lastly, this review highlights the need for further methodological development in studies assessing the perception of volunteers in the epidemic preparation and management process Therefore; methodological development in this area will be needed to ensure that data collection instruments and adequate analytical approaches are used in studies assessing the perception of volunteers, beneficiaries and staff members. The findings also highlight the need of gathering volunteers' perceptions of the work they are doing in Red Cross in general.

5.2 Limitations of the study:

Information on the ECV toolkit, especially from the field level were not well documented in the past Appeal and DREF reports. The convenience sampling limits the possibility to generalisation of the findings to all Red Cross volunteers. The number of volunteers interviewed is small; they only represent two national societies. Since we were fully dependent on the Red Cross national societies to select the volunteers for interview, there could be a bias in the selection process. The location of national societies from Geneva also limits the possibility for additional observation and further triangulation which could be a power for the study result.

5.3 Conclusion:

This study provides valuable data on the perception of Red Cross volunteers on the ECV toolkit. It can be used by IFRC, Zones, Regions and the national societies in addressing the gaps observed in ECV toolkit and improving its quality and future uptake. Looking at the volunteers' responses, they need the toolkit as it is important in preparing them for responding to epidemics and out breaks; its use in preparedness work as part of wider community health messaging is felt very relevant, but there are some financial and transportation challenge for the implementation of epidemic control activities in the field. Its role in delivering simple, clear and understandable messages to the vulnerable was appreciated but this needs further detailed study on the impact of the tool on the ground with the inclusion of different group of people in the sample. Despite the gaps and challenges, ECV was perceived achieving its original objectives, helping the national societies in delivering timely and required services by equipping and preparing the volunteers. This again requires further study with the inclusion of the service providers and beneficiaries.

The need for updating the material from time through incorporating more information is important: this may help the volunteers in addressing questions and comments to be responded at their level. The support to the national societies in finding fund for translation in to local languages and duplication of the materials whenever the need arise is key in addressing the gaps and building capacity of the NSs. Even though ECV was developed as a global tool, it is inevitable that regional and local changes will be required by NSs as they continue using the materials. The flexibility that allows the national society to adapt and make necessary changes is quite important and helps the national societies to make the toolkit fit to their own respective

local culture and contexts. It also enhances the future ownership of the tool by the community and sustainability of the activities.

Overall, this study is not exhaustive, it is a base for future further study on perception at different levels and research on the impact on beneficiaries is needed to get the full view on the value of the tool. The future study need to be done with improved methodology and tools with the inclusion of many countries who are using the tool and groups (staff, more volunteers, beneficiaries) who are directly or indirectly involved in the usage of the ECV toolkit.

5.4 Key findings and areas for further study:

The followings are some of the key findings recommended for further study as they play a key role in improving the future utilization strategy and quality of the ECV toolkit.

Content of the material:

Updating the ECV contents from time to time, add new information as required and make necessary changes regularly; considering the comments and recommendations from the national societies, volunteers, the community and other stakeholders. Detailing the specific areas mentioned by the volunteers: on immunization, malaria, pregnant women and vectors; adding more pictures that are culturally acceptable to the community.

Reference materials:

Preparing more reference materials at all levels; this helps the volunteers, the national society and literate community members to refer and read whenever they can. Back up with epidemic related audio-visual materials, posters, leaflets, and handbooks to support the methodology and attract audiences.

Language:

The translation of the ECV manual and toolkit in to the local languages of respective national societies. This ensures the passing of clear prevention message to the community and saves the time, energy and resources that will be invested in making oral translation at the spot.

Transportation and financial gaps:

Provide cost effective means of transport at the field level, increasing number of volunteers and train from each village. Concerning the mentioned financial problem, further study is required by including the NSs staff to trace the implementation processes where financial shortage is observed.

Motivating the volunteers:

Motivating the volunteers is important for the success of ECV toolkit on the ground. Volunteers can be motivated without looking for huge expensive investment. Future study should include ways the volunteers can be motivated while in the RC system.

Supervision and feedback:

Supervision to the volunteers at the field using structured format or checklist to collect information on ECV toolkit and volunteers is needed and important. This enhances timely tracing of problems and give timely solution. Providing ongoing feedback between the NSs is also important for the regular updating and recognition of the volunteers on the ground.

It is recommended that the IFRC plan for further multi level study with the inclusion of IFRC and Red Cross structures through which the tool flows; and structured impact assessment from beneficiaries' side is also important.

6 References:

- 1. IFRC, July 2009, The epidemic divide, IFRC Health and care department, Geneva
- 2. Manfred S. Green, et.al, January 2002, When is an Epidemic an Epidemic? Telaviv, Israel
- 3. WHO, Epidemic and Pandemic Alert and Response, Strategic Plan 2009-2013, Africa Regional office
- 4. IFRC, Evaluation report Epidemic Control for Volunteers Manual and Toolkit Evaluation of rollout 2008-2010, Geneva, 2008
- 5. IFRC, The Disaster Management Information System (DMIS) web page
- 6. IFRC, 2011, PROTECT. PROMOTE. RECOGNIZE. Volunteering in emergencies, Geneva
- 7. IFRC, 2006 2011, Epidemic Control For Volunteers (ECV) Reports, Geneva
- 8. IFRC, 2008, Epidemic control for volunteers, A training manual, International Federation of Red Cross and Red Crescent Societies, Geneva
- 9. IFRC, 2008, Epidemic Control-Disease tools-English, Geneva
- 10. IFRC, 2008, Epidemic Control-Actions tools- English, Geneva
- 11. IFRC, 2008, Epidemic Control-Community message tools- English, Geneva
- 12. Catholic Relief Services (CRS), 2005, Manager's Guide to SARAR-Based Community Health Modules, Baltimore
- 13. IFRC, 2008, Epidemic Control Training Facilitator's guide for the epidemic control workshop and training, Geneva
- 14. 1996, Single form for humanitarian aid actions, European commission Directorate-general for humanitarian aid ECHO

- 15. What is Qualitative Data Analysis (QDA)?, Ann Lewins², Celia Taylor¹ and Graham R. Gibbs¹, December 2010
- 16. P. Burnard, P. Gill, K. Stewart, E. Treasure and B. Chadwick, British dental journal volume 204 no. 8 April 26 2008, *Analysing and presenting qualitative data*, London, UK
- 17. Pat Bazeley Research Support P/L and Australian Catholic University, 2009, *Analysing Qualitative Data: More Than 'Identifying Themes'*, Australia
- 18. Glenn A. Bowen Western Carolina University, Cullowhee, Volume 10 Number 2 June 2005, Preparing a Qualitative Research-Based Dissertation: Lessons Learned, North Carolina
- 19. Anne B. Ryan , 2006, Methodology: *Analysing qualitative data and writing up your findings,* Mace: Maynooth Adult and Community Education
- 20. Hsiu-Fang Hsieh and Sarah E. Shannon, 2005, *Three Approaches to Qualitative Content nalysis*, *Qual Health Res*
- 21. Prachi Srivastava, DPhil, Nick Hopwood, DPhil, 2009, *A Practical Iterative Framework for Qualitative Data Analysis*, Srivastava
- 22. Virginia Braun & Victoria Clarke, 2005, Using thematic analysis in psychology
- 23. WHO, 2005, Communicable disease control in Emergencies, a field manual
- 24. WHO, 2000, PHAST Step-by-Step Guide: A Participatory Approach for the Control of Diarrhoeal Disease, Geneva
- 25. Prachi Srivastava, DPhil AND Nick Hopwood, DPhil, 2009, *A Practical Iterative Framework for Qualitative Data Analysis*
- 26. Ellen Taylor- Powell, Marcus Renner, 2003, Analyzing Qualitative data
- 27. Taylor & Francis, 2005, Qualitative data analysis A user-friendly guide for social Scientists
- 28. IFRC, January 2011 December 2011, Health annual report, Geneva
- 29. University of Surrey, *Department of Sociology-social research update*, United Kingdom, 2005
- 30. Martin N Marshall, 1996, *Sampling for qualitative research*, Oxford University Press, Great Britain

7 Annexes:

Annex 1. The time table/ schedule for the thesis:

Ac	tivities	Responsible	Date
Wr	ites a framework report with the help of academic and	Student	By Mid March
pro	fessional advisor. This report will be forwarded to the		
MF	H coordinator. The timeline will include dates for the		
ele	ments below.		
The	e framework report is co-signed by the	student and the advisors	By Mid March
Pro	ovide student with available documents related to	professional advisor	Throughout the
the	sis and overall practicum		internship
1.	Literature Review	Student	End of April
2.	Submit draft record review assessment tool & other	Student	1 st week of April
	study tools		
3.	Submit final application including methodology &	Student	Mid April
	tools for to both advisors		
4.	Collect data on the ECV as per the interview guide	Student	End of April
5.	Data Analysis and initial draft ready	Student	1 st week of May
6.	Feed Back on draft Analysis	Professional advisor and	Mid May
		the academic advisor.	
7.	Final Analysis (draft 2)	Student	Mid to end of May
8.	Summary of conclusions and research limitations	Student	End of May
	(draft 3) drawn from the analysis		
9.	Feedback on summary of conclusions and	Professional advisor and	Early June
	limitations(draft3)	the academic advisor.	
10.	Finalize conclusions (draft 4)	Student	Early June
11.	Submit Final Report (draft 5)	Student	June 11, 2012

Annex 2. Interview guide for volunteers

Introduction:

- Explain what the research is all about
- Confidentiality and other ethical issues
 - > Voluntary participation
 - Anonymity
 - > Inform that it will be recorded and later be deleted
- How long the questionnaire takes
- They will be informed the result
- It is a free open discussion process

Demographic data:

Date of	Interview					
Voluntee	Volunteer code					
Region	Region					
National Society/ Country						
Age	Sex	Education level_				

Background questions:

- 1. How long did you serve as ECV volunteer?
- 2. In how many operations did you use ECV?
- 3. How many days did you spend in attending the initial training?

Perception questions:

- 4. Tell me about your experience with using this tool kit?
- 5. Why do you think you need the ECV toolkit?
- 6. Do you think it has served its purpose so far? (Any example including confidence level)?
- 7. What resources do you require to implement ECV in the community?
- 8. How easy was it for you to implement it practically in the community?
- 9. Any feedback from the community?
- 10. When did you use the ECV? What were the challenges met?
- 11. What were the strengths and weaknesses of the tool kit?
- 12. What could have been done better to address the weaknesses of the project?
- 13. Which activities of the ECV toolkit were not worthwhile and should not continue? Why?
- 14. Do you think the Red Cross has to continue using the tool?
- 15. Do you have any question/ comments you wanted me to know?

Annex 3.Consent Form

Title of research project: "Understanding volunteer's Perceptions of Epidemic Control For Volunteers (ECV) tool kit"

Researchers: Mitiku Raga, Intern at the IFRC

You are invited to take part in a research project; this form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask.

What are the aims of the study? To explore the volunteer's perception of ECV tool kit and its practical use.

Who can participate in the study?

A national society volunteer who have used the ECV toolkit, regardless of age and sex.

How will you make sure your information remains confidential in the interviews?

All information shared during the interview will be kept confidential. No names will be included in any of the written notes, publications or presentations. The interviews will be tape-recorded in order to ensure accuracy. However, the tape will be destroyed once it has been typed up. Electronic copies of the data will be kept on a password protected computer key and paper copies will be kept in a locked place. Quotations from interview transcripts may be used to support ideas but no personal names will be used and quotes that have potentially identifying information will not be used. You are welcome to ask questions at any time during your participation in this research.

Your Signature:

I have understood the description provided; I have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project, understanding that I may withdraw my consent at any time. I consent to being audio-recorded for the purpose

been given to me for my records.	ely documented. A copy of this Co	nsent Form has
Signature of participant	Date	
Researcher's Signature: I have explained this study to the best of believe that the participant fully understanderisks of the study and that he/she has freely	s what is involved in being in the stu	•
Signature of investigator	Date	_
Telephone number: E-mail address:		

Annex 7.

International Federation of Red Cross and Red Crescent Societies

The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest humanitarian and development network, with millions of volunteers in 187 member National Societies. We are guided by Strategy 2020 – our collective plan of action to tackle the major humanitarian and development challenges of the present decade. We will continue 'saving lives and changing minds' by focusing our work in three key areas: 1) disaster response and recovery, 2) development and 3) promoting social inclusion and peace.

The Fundamental Principles of the International

Red Cross and Red Crescent Movement Humanity / The International Red Cross and Red Crescent Independence / The Movement

Humanity / The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality / It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality / In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence / The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary service / It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity / There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality / The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.