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# Supporting Effective Regional Coordination of Advocacy and Strategic Communication for Emerging Pandemic Threats

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## Abstract

**The Problem:** Emerging pandemic threats are on the increase given the increasing levels of risks from overpopulation, unrestricted travel and mutations of existing viruses into more dangerous and resistant strains.

**Objective:** The study objectives were to conduct a needs assessment with identify stakeholders in relation to a Zoonosis advocacy package at country and regional level. This included identification of primary, secondary and tertiary audience segments for targeting of possible communication campaigns for pandemic threats, to identify any barriers or benefits to the role out of the advocacy package, to incorporate participatory approaches to build ownership and engagement with the strategy by stakeholders and program beneficiaries and finally, to build internal capacity to undertake advocacy initiatives for regional 'One Health' approach in the future.

**Methods:** The elicitation research utilized a rapid assessment and response (RAR) methodology incorporating qualitative field-work including semi-structured interviews with key informants. Desk research of secondary data sources supported in-field findings.

**Results:** Results identified a number of gaps and challenges existing in effective program roll-out with a need for more effective coordination at national and regional levels, greater public and civil society engagement, and more effective advocacy and communication were necessary for effective rapid response in the case of out-breaks of infection. Essential insights on key informant expectations for a 'One World–One Health' advocacy package were also identified, to support national and regional engagement and rapid response.

**Implications:** The application of rapid assessment and response, to inform the design of advocacy approaches and crisis communication for emerging pandemic threats is highly recommended. RAR can provide important insights from which to mobilize political will, national and regional resources through purposive advocacy initiatives in the resource constrained settings of developing countries. RAR is found to be particularly effective when dealing with public health priorities such as zoonosis and other pandemic threats with the survey method achieving in a relatively short time period, a comprehensive understanding of stakeholder needs and wants. Future research should also incorporate needs assessments with program beneficiaries to develop a comprehensive understanding of audience needs and wants in relation to EPTs.

**Keywords:** Emerging pandemic threats; Overpopulation; Mutations; Viruses

## Introduction

The impact of emerging pandemic threats (EPTs) such as Avian Influenza, Anthrax, Monkeypox and Viral Hemorrhagic Fevers–Ebola, Marburg and Yellow Fever–can have devastating effects with the burden of disease most evident in low-and middle-income countries [1-2]. However, if a rapid response is not conducted prior to or immediately upon an outbreak of a highly infectious pandemic threat, which has a relatively high rate of mortality, it can have catastrophic implications for both developing and developed countries. Phenomena such as species loss, ecosystem degradation, caused by extractive industries such as mining, logging and fishing, pollution, invasive alien species, and global climate change are fundamentally altering life on the planet from wilderness areas and oceans, to the most densely populated cities. Therefore, the rise of emerging and resurging infectious diseases, threatens not only humans and their food supplies and economies, but also the biodiversity of fauna and flora that supports the living infrastructure of our world [3].

Diseases transmitted between human, wild and domestic animals are having a significant and growing impact on public health, livestock economies and wildlife conservation [4]. Studies reveal that emerging disease outbreaks have quadrupled worldwide over the past 50 years with some 60% of the diseases transmitted from animals to humans and the majority of those originating in wildlife [5]. The social and economic costs of EPTs can be considerable with H5N1 avian influenza estimated to have cost over US$20 billion in economic losses. However, if an infection such as H5N1 caused an influenza pandemic, it could cost the global economy around US$2 trillion [6]. More recent outbreaks of Ebola in West Africa are predicted to require "at least a 20-fold surge in assistance" identified by the UN, to

confront the outbreak [7]. The impact of EPTs on economic and social structures can be buffered through a prior investment in preparedness and response readiness. Investments by countries in prevention and control strategies, more specifically through more strategic advocacy and communication, can also be highly cost-effective.

## One World-One Health

As a result of the interconnectivity between countries through trade, tourism and globalization, the world has turned into a global village. Thus, no country or continent is isolated from the other. In the same vein, deadly pathogens have the ability to move from one country to another through goods and movements of people. The world today has become one with some in the international community subscribing to the idea of having a 'One-Health' initiative [8]. This emanates from the fact that we live in one world where wildlife, livestock, people and the ecosystems in which they inhabit can create diseases, and these diseases do not respect boundaries. Therefore, what happens in one country has impacts far beyond its borders [4].

One-Health represents an interdisciplinary strategy to address health from a holistic, integrated, perspective rather than a discipline-based, fragmented approach. This is increasingly becoming a necessity in health service delivery and population health since the majority of epidemic outbreaks originate from animals or zoo noses [9]. Effective responses in mitigating such outbreaks requires a multidisciplinary approach in which medical personnel, veterinarians, social workers and/ or anthropologists work together with communication staff as a team in responding to a common challenge. Disease and care managers operating within Primary Health Care settings are one component to this response, once outbreaks occur, to empower patients living with or at risk of diseases to take a more active role in their health, thereby improving patient health outcomes and appropriate resource utilization [10].

However, given the need for appropriate preparedness and an efficient response to zoonotic disease outbreaks, requires establishment of an advocacy and communication strategy between the Ministries of Health, Agriculture and a number of other stakeholders. Additionally, effective advocacy and crisis communication is an essential aspect to minimize the impact of outbreaks and reduce the panic and stigma which may drive these diseases underground, thereby, facilitating the spread of infection.

To combat the threat of emerging infectious diseases a strategic framework has been developed by leading animal and human health, and agriculture agencies under the broad umbrella of 'One-World, One-Health' (OW-OH). The OW-OH concept emphasizes the need for a better understanding of the drivers and causes surrounding the emergence and spread of infectious diseases. The OW-OH strategic framework also has as its core a focus on preventing emerging infectious diseases of animal origin, at national, regional and international levels, instead of simply responding to them once they have occurred [11]. To achieve this end, OW-OH is seen as ultimately a framework to forge inclusive and equal partnerships and interdisciplinary collaborations between doctors, veterinarians, and other scientific-health and environmentally related disciplines, including advocacy and communication. Once properly implemented and synergized OW-OH may support and advance health care for humans, animals and the environment into the 21st century and beyond by accelerating research to build the scientific knowledge base, enhancing public health programs, and improving medical education and clinical care. If this can be achieved, OW-OH may save countless millions of lives from our present and future generations, and unprecedented social and economic costs to Governments [3].

The way that OW-OH operates within each country setting is dependent on a range of factors including the risk profile of the country, existing capacity and functional structures to deal with EPTs. In terms of a number of African nations, there are considerable challenges to implementing a One-Health approach for detecting and responding to EPTs. For instance there are currently few if any national or regional policies mandating coordination and collaboration between country partners and relevant Ministries in Africa. This means that communication on EPTs is only ad hoc and occurs when an outbreak is already in process. There is also no budget for disease surveillance, as this is only allocated when the need arises.

National Taskforces established also currently address only a limited number of zoonoses such as Anthrax and Avian Influenza and as such are not fully informed on other EPTs. Decentralized systems, also require strong district capacity and effective management. However, in the human, veterinary and wildlife health systems, district management capacity is limited, and leadership, management and specialist skills are in short supply at all levels of the health care system. For example, the veterinary sector generally in Africa has very limited capacity for disease diagnosis, and the majority of district labs are dysfunctional. Training of health professionals in all systems is difficult. The human, livestock and wildlife health systems do not support in-service training; there are no standardized curriculums for wildlife veterinary training and quality assurance is minimal.

The livestock health systems also suffer from a fragmented chain of command, resulting in poor reporting of animal diseases and escalated epidemic outbreaks. District Veterinary Departments lack proper facilities, adequate human resources, and transport. There are no policies that address veterinary laboratory services, veterinary services delivery, and the role of community animal health workers. The wildlife health system also faces significant challenges. There are limited policies at national level to guide the sector, there are no licensing bodies that assess the quality of wildlife service providers, and there are few wildlife veterinarians. As a result, as well as the current pandemic threat of Ebola in West Africa, there have also been a number of zoonotic outbreaks reported in countries like Uganda including Ebola (2000/2001, 2007/ 2008), Anthrax (2005, 2009), Yellow fever (1972, 2010), and Marburg (2007, 2012), with other conditions such as Trypanosomiasis, Parasitic hydartidosis, Hepatitis E, Leishmaniasis, Brucellosis, Jiggers, Tuberculosis and Rabies endemic. A number of other zoonotic diseases have the potential for mutation or causing serious outbreaks if left unchecked including: Avian Influenza H5N1, Pandemic Influenza H1N1, Rift Valley Fever (bovine, ovine, caprine, human), Tuberculosis (bovine), Leptospirosis (bovine), Cysticercosis (pigs), Rabies (wild dogs, cats), Monkey pox (monkeys) and Wild Poliomyelitis (bonobos).

## Advocacy and Communication for EPTs

Advocacy and communication for public health issues is an integral aspect of any disease prevention and control programs. However, effective advocacy and communication for EPTs is a less developed area of technical support, given the focus to date on the clinical and other technical aspects of these programs. Despite the resource limitations, advocacy and communication remains an important

consideration given the potential for rapid escalation of EPTs in the developing world. For these reasons, high-level advocacy and effective communication for emerging and recurring health threats such as hemorrhagic fevers, avian influenza and other animal-human infectious diseases is critical in preventing and controlling the potentially devastating outbreaks of these epidemics. But what does advocacy involve? WHO identify advocacy as: "Activities designed to place a health issue high on the political and development agenda, foster political will, increase financial and other resources on a sustainable basis" [12].

However, advocacy approaches can also operate at a 'population health level' through mass media communication channels to simultaneously raise public awareness, build knowledge and change attitudes and behaviors of opinion leaders and others toward prevention and improved threat preparedness. For optimal results, best practice advocacy and communication approaches identify that the process should be strategic, collaborative and participatory, focusing on a range of specific audiences, multi-level and integrated–incorporating interpersonal communication supported by mass media approaches [13]. Additionally, advocacy and strategic communication approaches should center on building specific knowledge about the disease conditions, as well as impacting on attitudes and behaviors, with ongoing monitoring of the communication program to inform future decision making. Challenges include the strong emotions evoked such as fear, anxiety, distrust, anger, helplessness, and frustration and the barriers to effective communication created when dealing with issues of high concern [14] with authors identifying the importance of developing risk communication strategies by consensus [15].

## Method

With these factors in mind it is important to understand stakeholders needs and wants, in relation to a regional approach for EPTs prevention and control encompassing an advocacy and communication package. To achieve this end, consultations were conducted with key stakeholders in Central and East African countries. The fieldwork encompassed a rapid assessment and response approach which is a research method with a proven track record in the resource constrained settings of developing countries [16-18].

Discussions on an advocacy and communication package were conducted with 38 key stakeholders in six countries of Uganda, D.R. Congo, Kenya, Ethiopia, Tanzania and Rwanda, as well as seeking advice from program partners in the USA and Italy. Key informants included stakeholders from donor agencies such as USAID (Washington DC),WHO (Africa Regional Office), Food and Agriculture Organization (Rome, Italy), World Organization for Animal Health, African Union Inter-African Bureau for Animal Resources (Kenya), Centers for Disease Control (Uganda), One Health Central and Eastern Africa Alliance representatives, academics from National University Schools of Public Health, Veterinary and Environmental Sciences, senior staff from Ministries of Health, Agriculture, and Wildlife Services, and NGO stakeholders.

Discussion agenda were developed to incorporate a review of the existing advocacy materials available for Zoonotic diseases and an understanding of the ways that the materials and activities were currently applied. Other discussion items included: processes for planning and implementation of advocacy activities for EPTs at a country level, identification of the main gaps in the response to outbreaks, information on EPTs and how they may be best addressed through advocacy and communication approaches, and examples of One-Health approaches that were considered to have worked well in the past. Additionally, a Zoonotic Diseases Advocacy Resources Rating Sheet was also developed to gauge stakeholder views on a range of media communication approaches.

Given the broader area of research to evaluate issues related to regional coordination and management of advocacy and strategic communication of a range of EPTs, the research was limited in scope. The study did not include assessment of audience or workforce risk assessment factors15 as this was considered to be a component of formative research to be conducted at a future date in relation to specific emerging health threats. Interviews were conducted face to face with stakeholders with moderators compiling notes in Word format for discussion at the end of each day of data collection. The rapid assessment fieldwork was conducted over a 12 day period in 2011.

## Study Findings

A number of issues emanated from consultations with Central and Eastern African country key stakeholders. At a regional level issues included program coordination, technical support, advocacy approaches, messaging and design for a broader EPTs advocacy and communication strategy, and monitoring and evaluation mechanisms to assess program performance. Advice and recommendations from regional and country stakeholders was combined with a review of the literature to provide recommendations for an advocacy package for EPTs (Table 1).

| Issues | Stakeholder Feedback | Recommendations |
|---|---|---|
| Program Coordination/Regional Approach | "OHCEA should work very closely with the national task force. It was quite effective and well organized, there was the overall task force and under it was specific committees – Technical Working Groups, on prevention; there are a few different working groups."<br>Communications Expert–AU-IBAR, Kenya.<br>"There should be 'One Health' at ministerial level but also the Taskforce at inter-ministerial level. If you have these groups there will need to be two-way communications which needs to be institutionalized."<br>Senior Officer–Veterinary Public Health–FAO, Italy. | 1. Establish or consolidate existing regional, national and provincial coordinating mechanisms.<br>2. Work with program partners to develop an Advocacy and Communication Strategy at regional level which can be adapted for country specific strategies. |

| | | |
|---|---|---|
| Technical Support/Capacity Building | "We haven't yet incorporated One Health into the government ministries. In fact, the problem is we don't trust each other. Each person guards their own territory."<br>Focal Point–OIE, DR Congo.<br>"Right now we've developed a Strategic Plan, which we've shared among the countries, but we have still to chart activities."<br>Lecturer–Muhimbili University School of Public Health and Social Sciences, Tanzania. | 1. Develop a regional Advocacy and Communication Strategy which can be adapted for country specific use.<br>2. Conduct trainings to build country and regional capacity for advocacy and communication activities for community and population level approaches. |
| Advocacy Approaches | "For the future is the issue of champions who can take this forward to the ministries."<br>Public Health Physician, Program Manager, OHCEA<br>"We don't have any advocacy materials specifically for One Health. We do have health education materials we have worked with the MOH, including videos."<br>Senior Researcher–CDC, Uganda. | 1. Identify EPT "program champions" and build their technical capacity for advocacy and communication.<br>2. Identify gaps in infrastructure and human resources and advocate for funding and support. |
| Messaging and Design | "There is no visual identity which simply and clearly promotes the four quadrants of One Health approach: Human, Wildlife, Domestic livestock and the Ecosystem. Where the concept has been expressed graphically, it's not resolved or universally applied."<br>Project Coordinator–RESPOND, Uganda.<br>"Clearly what is needed are materials which can be used at regional level."<br>Epidemic Alert and Verification Officer–WHO (AFRO-EPT), Brazzaville, RoC<br>"Outside of partner agencies the concept of 'One Health' is not well understood with stakeholder understanding differing according to the area of technical expertise."<br>Research Director–Mountain Gorilla Veterinary Project, Rwanda | 1. 2. Develop a regionally specific visual identity for OW-OH which can be adapted (local languages) for country specific use.<br>2. Develop a core range of OW-OH materials for a regional toolkit to be adapted for country specific use.<br>3. Provide 6-8 key messages based on audience research that opinion leaders can use when advocating for EPT control in the community or through the media. |
| Program Monitoring and Evaluation | "Programs that come from the base can have good results, but those that come from the top are often not sustainable."<br>Director–School of Environmental Sciences, Kinshasa, DR Congo. | 1. Adapt the regional M&E framework to include advocacy and communication and build an evidence base for EPTs programming.<br>2. Identify key performance indicators (KPIs) and institutionalise across the region. |

**Table 1:** Core issues identified by EPT stakeholders in the East and Central Africa region and specific feedback and recommendations on advocacy and communication approaches

## Discussion

The literature and consultations with key stakeholders identified that effective advocacy and communication for EPTs may be best achieved through the evolution of more functional coordinating mechanisms comprised of key multisectoral partners including government ministries, academia, civil society and private sector partners, including the media. Essential aspects of the process moving forward are greater levels of capacity building and training of currently predominantly clinically and technically trained staff with little experience in public advocacy, with few funds committed for strategic communication to raise awareness and build political will in support of EPT control.

As well as providing a range of skill-sets, and potential human and financial resources to practically manage surveillance and rapid response for EPTs within recognized government structures, the multisectoral Taskforces are seen as perhaps providing the most effective coordination mechanisms for the timely planning and implementation of activities to combat these pandemics. This is due to the fact that the Taskforce members are comprised of senior public servants who ultimately influence policy development through advocacy for EPTs. The Taskforces can be ably assisted in the implementation, monitoring and surveillance activities through specialized expertise provided by Technical Working Groups (TWGs). These could include TWGs on Surveillance, Disease Prevention, Detection and Communication, ably supported by technical advisors with specific experience in these areas.

Given the enormous burden of disease that can be attributable to EPTs such as Ebola, and other zoo noses, management of the response ultimately needs to be directed from the Heads of States. Additionally, the rapid assessment identified there are currently a number of dormant Taskforces and TWGs which were originally established to tackle Avian/Human Influenza which will need to be reconstituted to generic 'Zoonotic Disease Task Forces'. Other challenges for country and regional programs are to effectively interface the predominantly academically focused Country Coordinating Committees (CCCs) with the existing Zoonotic Disease Taskforces responsible for the facilitation of policy development and implementation of the EPTs program. A structure showing how these coordinating groups could more successfully interface to provide rapid response for the comprehensive range of activities related to EPTs control is provided in Figure 1.

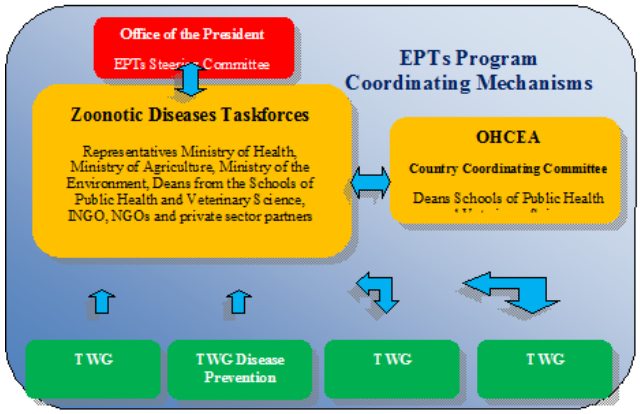


**Figure 1:** Country and Regional coordinating mechanisms incorporating CCCs–academic centers for excellence in EPTs programming and research–and Zoonotic Diseases Taskforces–Ministry policy formulation and response mechanisms, with functional Technical Working Groups.

Furthermore, in line with recommendations from stakeholders for a more effective Integrated Regional Coordination Mechanism [19] it is recommended that partners continue to work toward breaking down of the traditional 'vertical silo structures' of Ministries responsible for animal and human health services. This would further facilitate a learning environment toward improved advocacy and communication for EPTs by all agencies involved in the response, as well as providing appropriate resources to quickly and efficiently deal with outbreaks. A diagrammatic approach of how greater intersectoral collaboration can improve advocacy and communication for EPTs is provided in Figure 2.

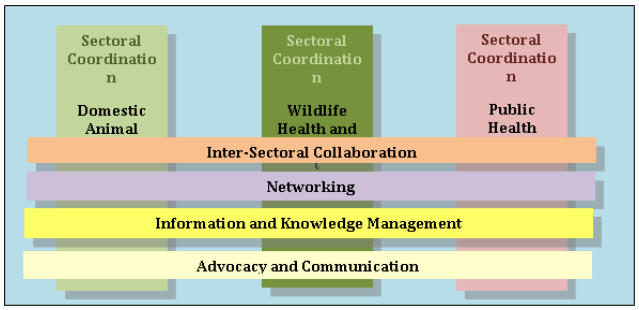


**Figure 2:** Improved and more purposive advocacy and communication for EPTs through greater intersectoral collaboration

Third, is the need for technical support to the program from communication experts and the media who currently are not actively engaged in programming efforts. This has resulted in confusion regarding program terminology, and a lack of science applied to areas of audience research, branding and messaging approaches. Feedback from stakeholders has provided for a number of options for a One Health Program Identity which may be more effective in communicating with low-literacy groups and across regional boundaries. Recommendations are for theses designs or others to be tested with program audiences for their efficacy Figure 3.


**Figure 3:** One World-One Health Visual Identity Concepts developed for pre-testing with program beneficiaries

Last, is the need for Governments, particularly in low-and middle - income countries to understand the enormous burden on health and development that EPTs can sustain on fragile developing economies, and the broader security issues these pandemics pose for regions. Although these lessons should have been learned from existing pandemics of HIV/AIDS, Malaria, and emerging drug resistant TB, which are still prevalent in many parts of the world, the political will required for the containment of new or re-emerging pandemic threats, to date, has been slow. The urgency to step-up efforts to address these health threats is emphasized by one of the stakeholders:

"It really is true that there is actually a tremendous problem of emerging diseases and we need to get people to understand the problem:" (Director–Faculty of Veterinary Medicine, Uganda).

As well as more effective coordination of activities at a regional level, advocacy and strategic communication is an essential component of any program, to build the political and social will to affect positive change to fight EPTs.

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