



HIFA Discussion on Library and Information Services for Disasters, Emergencies, Disease Outbreaks

EDITED version, August 2017

Introduction

Tsunamis, earthquakes; terrorism; biological, chemical or nuclear warfare; disease outbreaks, global pandemics, antimicrobial resistance... The health impact of national and global emergencies depends largely on the degree to which individuals, communities, nations and supranational bodies are adequately informed. To what extent are current Library and Information Services (LIS) meeting the information needs of different user groups in different contexts? Where are the gaps and what are the priorities for future action?

HIFA supported a major thematic discussion on these issues, starting 17 July and continuing to 18 August 2017. The discussion was preceded by an Evidence Briefing (see below) addressed the following themes and questions:

- What do we know about the availability and use of reliable information for global health emergencies, disasters and disease outbreaks? What works and what doesn't?
- Do you (or your organisation) have any real-life experience in dealing with an emergency/disaster/outbreak? Were you able to access/provide the information needed? What were the challenges and lessons learned?

Further information: <http://www.hifa.org/news/join-hifa-major-thematic-discussion-library-and-information-services-emergencies-disasters-and>

Acknowledgement: This discussion is sponsored by Public Health England (PHE), with technical support from Evidence Aid and others.

Metrics

There were 78 messages from 19 contributors in 9 countries (Ethiopia, Germany, New Zealand, Nigeria, Norway, Tanzania, UK, USA, Zambia).

Evidence briefing

The PHE/HIFA Evidence Briefing asks "What is the evidence around LIS to support global health, and disaster and emergency preparedness?". We are grateful to Caroline De Brun of PHE for researching and preparing this briefing to help guide our discussion.

http://www.hifa.org/sites/default/files/publications_pdf/Evidence_briefing_global_health_library_services_EAHIL_June_2017_FINAL_VERSION.pdf

The briefing is based on the abstracts of 68 relevant papers identified by a literature search (due to time constraints it was not possible to review the full text of all papers).

'For the purpose of this evidence briefing, natural disasters include tsunamis, storms, floods, earthquakes, etc. and man-made disasters include off-shore oil drilling, wars, civil unrest, terrorism, etc. Outbreaks refer to disease outbreaks, pandemics, infections, etc.'

The briefing organises the key points from the abstracts under five headings:

1. Access to information
2. Knowledge management
3. Existing programmes/resources
4. Roles of libraries, librarians and knowledge brokers
5. Social media.

1. Access to information

'Open access to health information is growing, and health literacy skills can impact on health and development (1). 24/7 access to information is increasingly available to health professionals and the general public via digital technologies, such as the Internet, smart phones, and social media (2). However, in times of crisis, power can fail and loss of access to this vital information provides significant challenges to emergency services who need uninterrupted access to inform decision-making (3). Access to timely, accurate, and quality health information for disaster teams is essential, (3, 4), but there is a digital divide with regards to access to this content (2). Free or low-cost Internet-based initiatives can improve access to the medical literature in low income countries, and open access journals are essential to supplying biomedical research at the point of need (5), but information skills training is also required (6). Two academic health sciences libraries describe their experiences of providing emergency electronic journal access to teams during a natural or man-made disaster (7).'

1.1 Further information from discussion:

Joseph Ana: Caroline, Thank you for this excellent intro to this discussion. We read your posting and chuckled after on reading, '--- However, in times of crisis, power can fail and loss of access to this vital information provides significant challenges to emergency services who need uninterrupted access to inform decision-making (3). Access to timely, accurate, and quality health information for disaster teams is essential, (3, 4), but there is a digital divide with regards to access to this content', because for most of the LMICs this is not limited to 'times of crisis'. It is the normal!

2. Knowledge management

'Knowledge management (KM) has proven to be effective in business, but models tend to be process driven, with less focus on outcomes, and therefore are less applicable to global health scenarios (8). However, the potential for KM to support global health is there (9). For example, the Knowledge Management for Global Health (KM4GH) Logic Model is a tool that helps global "health professionals plan KM activities with the end goal in mind" (8). Effective data sharing is vital in environments facing crisis, such as disease outbreaks (10). However, in disadvantaged populations, there is often "limited awareness, uptake, and use of knowledge to inform" health improvement actions (11). Knowledge brokering (KB) describes the role of an intermediary who connects people who have information/knowledge/skills with someone who does not, so that expertise can be shared, and gaps in knowledge filled. It can play a key role in supporting data sharing, and common elements of KB approaches focus on "acquiring, adapting, and disseminating knowledge and networking" (12). It can be difficult bringing scientific evidence to health workers and decision-makers, but empirical research has demonstrated that KB is an effective method of facilitating access to information (13).

'Librarians are knowledge brokers who can help negotiate the transfer of knowledge and information to disaster teams so that they can make effective decisions and work together with the evidence and produce a more relevant document to inform others (14). In Burkina Faso, West Africa, Canadian and African researchers successfully applied a KB strategy and held two one-day workshops to explore the issues of low research use and develop a strategy to support the Burkinabe context (15). There are "existing knowledge to action models/frameworks that can help guide knowledge translation to support action" in less advantaged areas (11). Knowledge management systems (KMS) have proven to be effective in disaster planning and response, but their success is dependent on acceptance by users of the system, and the availability of resources to maintain the system (16). Members of an emergency response management community of practice used a system of social tagging and social recommender system to facilitate the management and sharing of information resources (17, 18).'

2.1 Further information from discussion:

3. Existing programmes/resources

This part of the briefing highlights programmes and resources that are already available to people who are operating in crisis situations, such as natural disasters, man-made disasters, and disease outbreaks.

In the UK, health librarians are volunteering to become involved in international development activities in low income countries, sharing their information skills with librarians (19).

Projects to improve access to information operating in Saharan Africa include Book Aid International (www.bookaid.org/), Health Information for All (www.hifa.org/), INASP (www.inasp.info/en/), Information Training and Outreach Centre for Africa (www.itoca.org/), Phi (Partnerships in Health Information), Health Books International (www.talcuk.org/ - formerly Teaching-aids At Low Cost), Tropical Health and Education Trust (www.thet.org/), and Research4Life (www.research4life.org/) (19).

Evidence Aid (www.EvidenceAid.org) was established after the Indian Ocean tsunami of December 2004. The aim of this resource is to provide a single source of evidence to help inform decision-makers preparing for and responding to disasters (18, 20).

The National Library of Medicine (NLM) "has a long history of providing health information, training and tools in response to disasters", but in 2008, they launched their Disaster Information Management Research Center (disaster.nlm.nih.gov/), to help libraries and librarians are trained and prepared to respond to information needs following disasters. This resource includes Disaster Lit@: the Resource Guide for Disaster Medicine and Public Health; a database of open access links to disaster medicine and public health documents available on the Internet at no cost (21-27). In addition to this resource, NLM has also "joined forces with the Pan American Health Organization/World Health Organization, the United Nations International Strategy for Disaster Reduction, and the Regional Center of Disaster Information for Latin America and the Caribbean (CRID)". Together, they aim to support libraries and information centres in Central America, and improve access to health and disaster information, by developing the Central American Network for Disaster and Health Information (www.cridlac.org/ing/proyecto_ing.html) (28).

Another initiative from NLM and health sciences publishers is the Emergency Access Initiative (EAI) (eai.nlm.nih.gov/docs/captcha/test.pl?url=), which was set up following the experiences of libraries struggling "to provide relief workers with health information resources and services". This service is provided to healthcare professionals and libraries following a disaster affecting a region of the United States or throughout the world. It is only active when a disaster event is named and the access period specified (29).

The International Federation of Library Associations and Institutions (www.ifla.org) drafted the "Principles of Engagement (to be used by IFLA and its members in library-related activities of disaster risk reduction and in

times of conflict, crisis or natural disaster" www.ifla.org/publications/ifla-principles-of-engagement-in-library-related-activities-in-times-of-conflict-crisis (30).

In 2004, the collaboratively written web-based encyclopaedia, Wikipedia formed a group called WikiProject Medicine, which aims to improve Wikipedia's health-related entries. Health professionals are encouraged to edit the medical content on Wikipedia, "with the goal of providing people with free access to reliable, understandable, and up-to-date health information" (31).

In other areas, wiki spaces have been used to create portals linking to housing disaster news, and information resources (32).

3.1 Further information from discussion:

3.1.1 National Library of Medicine Disaster Information Management Research Center

We at the National Library of Medicine Disaster Information Management Research Center are very excited by the thematic discussion on the HIFA listserv right now. There are several tools and resources I would like to share with you that support evidence in disasters and disease outbreaks.

Start by taking a look at our Guide to Disaster Medicine and Public Health Literature
<https://disasterinfo.nlm.nih.gov/dimrc/medscilit.html>

Most of you are familiar with PubMed. Did you realize that there are many journals and MESH terms related to disaster medicine in PubMed? Our list of MeSH Terms Used in Indexing Disaster-Related Journal Articles is updated each year when NLM sends out its annual updates to MeSH:
https://disasterinfo.nlm.nih.gov/dimrc/mesh_disaster.html

In disaster medicine, it's important not to overlook the grey literature. Disaster information changes rapidly, and grey literature is vital to planning and response efforts. Disaster Lit®: The Resource Guide for Disaster Medicine and Public Health is a database of free online resources on disaster medicine and public health including expert guidelines, factsheets, websites, technical reports, webinars, and other tools. <https://disasterlit.nlm.nih.gov/> Disaster Lit is updated daily; librarians at NLM select from over 100 vetted sources to ensure that the reports, guidance documents, and other information that is not found in PubMed is collected and placed in a searchable database.

Please take time to review the other tools and resources in our Guide to Disaster Medicine
Siobhan Champ-Blackwell

The National Library of Medicine Disaster Information Management Research Center is very interested in the roles librarians play in disaster preparedness and response. We have developed a training program that includes a course on Information Roles in Disaster Management (See training program here: <https://disasterinfo.nlm.nih.gov/dimrc/trainingresources.html>)

We also maintain a webpage/bibliography of articles written by or about librarians and their role in their community's emergency and disaster events
<https://disasterinfo.nlm.nih.gov/dimrc/bibliographydisaster.html>

The Knowledge and Library Services (KLS) Evidence Briefing is in the Disaster Lit database <https://disasterlit.nlm.nih.gov/record/15625>. We will be reviewing the references in this document to ensure that the in scope articles are included in our bibliography!

It is amazing to see how librarians become involved in disasters and emergencies. Facebook has a public group that some might already be on: Libraries Step Up (in times of crisis)
<https://www.facebook.com/groups/libcrisis/>

DISASTR-OUTREACH-LIB Discussion Listserv

<https://disasterinfo.nlm.nih.gov/dimrc/dimrclistserv.html>

<https://disasterlit.nlm.nih.gov/record/15566>

Medbox

MEDBOX - The Aid Library www.medbox.org went online in October 2013. The MEDBOX collates professional medical and humanitarian guidelines, textbook, practical documents on humanitarian and health action available online and brings these into the hands of aid workers: when the need it, where they need it!

MEDBOX provides fast and free access to relevant guidelines, posters, assessments, country-specific information and much more. Specialized toolboxes have been established to be able to respond to on-going disasters, emergencies and disease outbreaks. So far, 10 Toolboxes have been made available: i.e. Ebola, Cholera, Natural Hazard, Syria, South Sudan, Rapid Response. In particular, during the Ebola outbreak, the EBOLA TOOLBOX www.ebolabox.org was established quickly after the Ebola outbreak providing online the most important treatment and infection control guidelines in French. Furthermore, country-specific statistics, posters and education materials were also made available. The CHOLERA Toolbox www.cholerabox.org has responded to the cholera outbreak in Haiti offering IEC material in Creole and to the current one in Yemen providing guidelines in Arabic.

The MEDBOX www.medbox.org is an innovative online library aiming at closing the gaps in the provision of relevant information. MEDBOX is a "one click", constantly updated and quality assured online library with up-to-date practical medical resources.

Sieglinde Mauder

Evidence Aid

Evidence Aid was established following the tsunami in the Indian Ocean in December 2004. It uses knowledge from systematic reviews to provide reliable, up-to-date evidence on interventions that might be considered in the context of natural disasters and other major healthcare emergencies. Evidence Aid seeks to highlight which interventions work, which don't work, which need more research, and which, no matter how well meaning, might be harmful; and to provide this information to agencies and people planning for, or responding to, disasters. Read more about our origins and research priorities and see our progress on our website (www.evidenceaid.org). Our mission is 'To inspire and enable those guiding the humanitarian sector to apply an evidence-based approach in their activities and decisions' and our vision is that 'Those in need receive humanitarian aid in the most timely, effective and appropriate way possible.'

Our objectives are:

Establish Evidence Aid as the influential go-to organisation for the evidence based approach towards humanitarian action.

Uphold and promote the value of evidence in health outcomes across sectors.

Identify the gaps in evidence for humanitarian aid and build the resources and network to address them.

Raise the capacity and commitment of those who guide the humanitarian sector to implement an evidence based approach...

We have a new video which explains why evidence is important in the humanitarian sector. I urge you to take 3 minutes of your day to listen to the video. You can find the text and the video here:

<http://www.evidenceaid.org/evidence-matters/>

I thought it would be useful to share the case study of why Evidence Aid was established. This shows why evidence is important in global health epidemics, disease outbreaks, disasters and emergencies such as this.

Preventing Post-Traumatic Stress Disorder after the Indian Ocean Tsunami

In the aftermath of the Indian Ocean Tsunami in 2004, a large number of organisations and healthcare practitioners went to countries affected by the tsunami in order to provide help and address the needs of those affected by this vast humanitarian crisis.

- 280,000 people were killed.
- More than 1 million people were displaced.
- Over 5 million were affected by the crisis.

The scale of the disaster was unprecedented in living memory. In India, a psychological support team were deeply concerned about the possible harm that could be done by well-meaning humanitarians. They set out to research and identify what works and what does not work in psychological interventions in crisis situations. They wished to ensure that their interventions were evidence based and had the best possible outcomes for people. Due to scale of the disaster and the numbers of people affected, they knew they had to get their response right first time. The only way they could do this was by using robust evidence...

Evidence Aid was established in 2004 as a direct response to this disaster and the resulting quest for knowledge to ensure that in the future evidence would be easily accessible to all agencies in emergency and crisis situations. Evidence Aid wishes to see a shift in the practice of humanitarian agencies away from seeking to do good to focusing on using available evidence to inform their decision making and practices.

Alliance for useful evidence

Anne Brice: We do know that mobilising knowledge - getting it to the right people at the right time - is difficult enough in non-emergency settings. For examples, The Alliance for Useful Evidence has looked at what works in providing evidence to policy makers (<http://www.alliance4usefulevidence.org/publication/using-evidence-what-works-april-2016/>). Is it possible to take existing work like this out of context, and apply it to other settings? What type of factors or problems need to be overcome in disaster or emergency settings? Are there examples of practice (those that work or don't work) that could be written up and shared?

African Centres for Disease Control

Neil: As we continue with our discussion on library and information services for disease outbreaks, can anyone explain the relative roles - from a LIS perspective - of the new Africa Centres for Disease Control and Prevention as compared with the WHO Regional Office for Africa? While new political and financial support is welcome, it's hard to see that it is cost-effective to set up an entirely new institution rather than strengthen an existing (and chronically underfunded) one (WHO AFRO). Given that ACDC now exists, what can be done to promote cooperation and coordination between it and WHO AFRO, and minimise the risk of duplication of effort?

Neil: Below is a press release from the new Africa Centres for Disease Control. Read online here:

<https://au.int/en/pressreleases/20170803/central-africa-establishes-africa-centres-disease-control-and-prevention>

Central Africa establishes the Africa Centres for Disease Control and Prevention Regional Collaborating Centre to improve surveillance, preparedness and response to infectious and non-communicable diseases...

About the Africa CDC

The Africa CDC supports all African Countries to improve surveillance, emergency response, and prevention of infectious diseases. This includes addressing outbreaks, man-made and natural disasters, and public health events of regional and international concern. It further seeks to build the capacity to reduce disease burden on the continent.

WHO

Turning scientific evidence into life-saving action

WHO and health sector partners are taking steps in 4 areas recommended in the report:

- strengthening surveillance systems to monitor cases and outbreaks of malaria;
- increasing people's access to care in clinics and to health facilities;
- spraying insecticides and distributing bed nets as part of vector control; and
- administering malaria drugs to children under 5 every month (July to October).

http://www.who.int/features/2017/malaria-control-nigeria/en/?utm_content=buffer581e8&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

Emergency Hub Nairobi

We learn from the website of the WHO Africa Regional Office about a new Emergency Hub in Nairobi:

<http://www.afro.who.int/news/who-establishes-emergency-hub-nairobi>

Building Bridges

Chris Zielinski, UK: The way WHO looks at emergencies - even the terminology - is worth considering in approaching health communications in all countries. WHO talks about emergency awareness, preparedness and response. "Awareness" implies cataloguing the risks, "preparedness" requires training, developing guidelines and manuals and establishing information strategies to counter specific risks, while "response" implies implementing what has been catalogued and prepared for. To take an example, are we ready for an outbreak of Zika in Africa? According to The Lancet recently, there may already be an epidemic underway, disguised as Chikungunya and other conditions. "Zika" was named after a place in Uganda - is Uganda ready? Not yet - but we hope it soon will be. In April 2017, a Building Bridges forum was held in Kampala. One of its outputs was declaration on health communications (this will be shared on this and other lists shortly), which distinguished routine health information from emergency health information. Another output of the Building Bridges forum was a proposed network to facilitate sharing knowledge for health between researchers, policymakers and knowledge intermediaries like journalists, broadcasters, librarians and journal editors. The forum was developed by a local team working with the US National Library of Medicine, in partnership with African Health Sciences, and assisted by the Association of Health Care Journalists, Partnerships in Health Information (Phi) and the Alfred Friendly Press Partners, in the context of the African Journal Partnership Program (AJPP). While continuing to work to develop the Uganda network, and if funding becomes available, we intend to repeat this process in other countries and develop further health communications networks.

OpenWHO

WHO launches a new e-learning platform, OpenWHO, with video courses on epidemics, pandemics and health emergencies. The courses are free and accessible to anyone wishing to register.

OpenWHO transforms complex scientific knowledge into easy-to-understand introductory video lessons, using a smaller bandwidth so that people in any country can access them. Offline versions are available for IOS and Android devices.

4. Roles of libraries, librarians and knowledge brokers

Twelve per cent of papers looked at the role of libraries, librarians, and knowledge brokers, in supporting disaster management teams.

Global health crises give rise to new information needs, and librarians have the necessary skills to support those needs (33, 34). Public libraries, in particular, are in a position to be able to provide access to essential health information and technology, and therefore they should be encouraged to prepare robust disaster plans so that they can support the public in times of crisis (35).

Some academic health sciences actively build collaborative partnerships with other libraries to support their institutions' global health activities (36). The role of a Global Health Informationist includes provision of relevant information skills training and supporting material to students prior to their departure to overseas global health projects. "Predeparture training gives the informationist and the library the opportunity to provide awareness of a broader field of global health information resources" (37, 38).

However, providing information services in emergency settings requires awareness of local context, such as cultural sensitivities, fears, insecurities, and inequity in literacy levels within the affected community (39). Following a catastrophic natural disaster, one medical school library developed a disaster and emergency planning outreach workshop, focussing on selected databases of the National Library of Medicine, such as (Haz-Map®, Household Products®, Toxtown®, Toxmap®, and MedlinePlus®), and development of personal disaster plans (40).

Librarians and information professionals can participate and provide support to local citizens and disaster teams in various ways, including, but not limited to, information provision.

"Disasters can and do happen anywhere, and library clients' information needs change suddenly during community-wide disasters" (41). Public libraries are community institutions which can contribute to community resilience (42). They are well situated to partner with emergency management and other agencies to meet community needs pre and post disasters (43). During times of disaster, in addition to information provision, they can also provide practical services, such as being a charging station, warming centre, and meeting point (44, 45).

In times of disaster, access to the necessary information can be restricted, and lead to failure in rescue attempts (46). Usual practices can often not be applied due to numbers of people requiring assistance, and barriers to resources (6, 47). Librarians can also be on hand to provide practical support, particularly within hospitals, where additional physical support and/or pastoral care can relieve some of the pressures faced by disaster teams (48, 49).

Within health libraries, the Disaster Information Specialist is a new role that is emerging. It is not just about preserving and protecting collections, and ensuring continuity of service following disasters. It is about "providing information services to emergency managers and other disaster workers", and being involved in disaster planning activities (50, 51).

Another area where librarians can support disaster management is communication. Responsible communication is vital during periods of disruption, and libraries have the resources and networks to communicate effectively to the masses (45, 52-54).

With adequate training in disaster planning, information professionals can become valuable members of a disaster management team (55-57). Librarians can teach information literacy skills (58), ensuring that public health professionals are equipped to make evidence-based decisions in emergency situations.

Beatrice Muraguri, Sierra Leone (from HIFA archive): "Have been an Information Management Consultant with WHO in Sierra Leone for 2 years during the Ebola Outbreak and response... There were clear deficiencies in health information which not only caused fear and frustration but also

affected the response in many ways. I had to burn the midnight oil trying to put together any information coming in to feed the information hungry and thirsty global audience... people continued to believe in more superstitions and myths concerning the disease... as there was little or no documented information on the disease hence the wide transmission. If only information on the disease from previous outbreaks in Sudan, DRC and Uganda was well documented... a lot of deaths, cases and effects of one of the biggest outbreaks in the public health history could have been avoided. For us who were trying to get the much needed information to feed the world, it was really frustrating."

Beatrice Muraguri, Sierra Leone (from HIFA archive): "There has never been such an information vacuum hence the wide spread of the menace [Ebola]." Beatrice Muraguri, Sierra Leone, 30 October 2014

Bintu Mansaray, Sierra Leone (via CHIFA): Working during the Ebola outbreak in Sierra Leone was an eye opener. When the outbreak started and for a few months after there was little information on what Ebola was, how to combat it and how to prevent it. As a young doctor who was dedicated to working, I got asked questions over and over again. I learnt about Ebola as a one page note during medical school. No special information was provided to doctors so I took to google like everyone else. I continued working right through the outbreak and we faced challenges that we just muddled through. Even after the outbreak when we started seeing survivors with complications, no information was sent to us clinicians on how to manage them. As I said before, we muddled through. Information on the outbreak was slow in coming so if there could be a library for teams to access in times of disasters or outbreaks that will be amazing. Electronic transfer on what to do via email to staff even if it's on a weekly basis will be lifesaving.

5. Social media

Social media, such as blogs, social networks, Twitter, Facebook, collaborative workspaces, and other online communities, play a key role in sharing and communicating vital information about natural disasters and other public crises (59-61). There are three particular ways by which social media can be used effectively in global health protection: information dissemination, disease surveillance, by monitoring real-time data (62, 63), and communicating with the general public (64).

Evidence shows that Twitter is an effective resource for disseminating information about global health crises, such as climate change, natural disasters, and oil drilling (65). Health professionals use Twitter to fight the battle against antimicrobial resistance in Africa. They "network and connect with worldwide experts, obtain real-time news from medical conferences, participate in live Twitter chats conducted by experts or medical organisations, or participate in international journal clubs" (66).

6. Other issues

Misinformation, vaccine scepticism, public trust, role of mass media

In a Disaster Lit webinar, Dr. Sulzhan Bali (@sulzhan) emphasises four core problems:

1. weak health systems
2. vaccine scepticism
3. misinformation
4. weak health governance.

Neil: ... is anyone else struck by the fact that the international community is doing so little to address these issues? In particular, vaccine scepticism and misinformation are specific issues that can and should be addressed more vigorously by international health agencies and governments. Indeed, as HIFA and the New York Law School have demonstrated, governments have an obligation under international human rights law to ensure that the all people have access to the information they need

to protect their own health and the health of others. In all areas of healthcare information, governments are falling far short of their responsibilities. In many countries they have lost the trust of the people, as we saw in the Ebola crisis. The problems of vaccine scepticism and misinformation are currently being ignored and deserve *far* higher priority. A minimal investment now - along with increased investment in health systems and governance more generally - is urgently needed to strengthen preparedness for a global pandemic.

Neil: We have previously discussed on HIFA the importance of (a) public trust in government/authorities in relation to public health messaging and (b) the role of the mass media in providing health information (and misinformation).

Both of these factors appear to have contributed to the situation described below.

In addition to the trust issues, I would argue that the mass media - newspapers, television, radio - have a moral obligation to ensure that they do not harm the public health by unquestionably spreading misinformation. Unfortunately, the media are driven by money, which in turn is driven by sensationalism. The mass media in high-income countries is also guilty of this, leading to confusion and widespread loss of trust in science. What can be done to improve health reporting?

CITATION: Controversial Ebola vaccine trials in Ghana: a thematic analysis of critiques and rebuttals in digital news

Per Egil Kummervold, William S. Schulz, Elizabeth Smout, Luis Fernandez-Luque and Heidi J. Larson

BMC Public Health 2017;17:642

<https://doi.org/10.1186/s12889-017-4618-8>

<https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4618-8>

Cross-agency collaboration and information exchange in disasters

I am a PhD student at Auckland University of Technology (AUT) in New Zealand. I am interested in eHealth and I'm looking into finding new ways of improving healthcare delivery during natural and man-made disasters. My research is about cross-agency collaboration and information exchange in disasters. I have worked in several regions affected by armed conflicts and I am very much interested into using my technical background in impacting healthcare during disastrous situations.

Reem Abbas

Below is an announcement from the WHO Africa Regional Office website. For me, what is striking about this is the implication that some fundamental work to promote coordination has not been done previously, namely 'mapping of partner institutions capacities in African region' and development of a 'repository of tools and documents for response to public health emergencies'. Which agency (if any) has been responsible for these functions in recent years, and why has such work not already been done? <http://www.afro.who.int/news/partners-agree-harmonise-actions-improve-effectiveness-humanitarian-efforts>

Communication and cooperation

Johanne Sundby: I happen to have visited North Korea in July 2017. We visited the medical Faculty and two hospitals in Pyongyang. We also traveled inside the city. There are quite a few visitors, also tourists, and sports and culture seem important. There is a curiosity for being more connected to the rest of the world, also expressed openly by colleagues; they want access to e-learning and medical science. The life in the city is nothing like "pre-war", rather the opposite; there is a lot of new construction, building and activity. Life is ordinary, people work, commute, marry, have children

and eat and sleep like in any other society. The medical education seems okay, there is tele-medicine, English language classes everywhere, and competent doctors and ok hospitals in the capital. So instead of warfare, and panic, we should increase our people-to people mutual exchange and understanding, even if we have completely different political systems.

Obi Egbuniwe: It is a tall order [tackling antibiotic resistance] especially in an environment (Africa) where geese run wild ie; patients ability to self diagnose and prescribe antibiotics, I am confident that speaking out in forums like HIFA can create some awareness powerful enough to drive change.

Ngozi Eunice Osadebe, Nigeria: People to people mutual exchange of ideas can work miracles in fostering peaceful co-existence. That is where public libraries come in, in fostering peace among communities. Efficient public libraries stock books published about different cultures and peoples. By making those materials available for public consumption, the library is indirectly encouraging people to appreciate each others culture and live in peacefully.

Caroline De Brun: I received the message below [from Charlottesville] earlier this week, and I wanted to share it with the discussion, because it emphasises the important role of libraries in terms of crisis, and the selflessness and bravery of librarians.

Bob Gann: This article in Library Journal describes how last week the library in Charlottesville, USA led the way as a place of dignity, remembrance and reconciliation
<http://lj.libraryjournal.com/2017/08/public-services/charlottesville-libraries-weather-violent-protests-offer-unity/>

Preparedness for disease outbreaks

Imagine Anycountry. A low-income nation-state with a weak health system. People have begun to report a mysterious respiratory infection that is rapidly fatal. The cause is an unknown virus. A localised outbreak quickly spreads from village to village. The virus is not only extremely pathogenic but also highly transmissible. The epidemic soon crosses the country's border to neighbouring states. A global health emergency beckons... Last weekend, the new Director-General of WHO, Dr Tedros, addressed G20 Heads of State assembled in Hamburg. It was the first time WHO had been invited to a Summit that is usually focused on finance and economics. His conclusion was fearful: "we are not well prepared"

Lancet Offline: The G20 and health — plattitudes and broken promises

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)31858-5/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)31858-5/fulltext)

John Nkengasong (Director, Africa CDC): A significant public health accomplishment that happened during the Ebola Virus Diseases outbreak, but that is not often highlighted enough is the manner in which Nigeria and Senegal controlled the Ebola situation in their respective countries. Why were these two countries very successful in tackling the threat? A case can be made that besides the existence of some public health capabilities in these countries, they were alert and sensitized. So, is the continent better prepared for a pandemic? The answer is clear - considerable progress has been made since the Ebola Virus Disease disaster but more work needs to be done. Some of the progress includes:

- 1) the continent is more alert to disease threats;
- 2) the response rate to potential pandemic threats has been significantly improved. For example, during the recent Ebola Virus Disease outbreak in the Democratic Republic of Congo, through a strong leadership of the government and with support from various partners including Medecins Sans Frontieres, WHO, Africa CDC, US CDC and others, there was a swift response and the outbreak was rapidly contained;
- 3) several countries have now established rapid respond teams. In fact the Africa CDC has an 800-person rapid volunteer respond team that can be deployed fairly quickly to address disease threats across the continent;

- 4) Africa CDC, WHO Afro, WHO EMRO, and the Global Outbreak Alert and Response Network are working closely to establish and expand a rapid response team;
- 5) WHO Afro has established emergency response centers in Dakar, Senegal, and Nairobi, Kenya; and
- 6) the Africa CDC has established four of its five regional collaborating centers (Nigeria Kenya, Zambia, and Gabon) with regional integrated surveillance and laboratory networks for rapid disease detection and response. The fifth Africa CDC regional center will be established in Cairo, Egypt in September.

The best way to prepare for pandemics is to prevent outbreaks from becoming pandemics. This includes strengthening various aspects of health systems including a comprehensive workforce agenda for public health, strengthening and or establishing National Public Health Institutions in all member states with the ability to conduct disease surveillance; coordinate laboratory networks; manage emergency operation centers, and establish innovative information systems. In July this year at the African Union summit, heads of state and governments issued a declaration committing to accelerating the implementation of International Health Regulations. Africa CDC sees this declaration as a new public health order for Africa, and should help catalyze our collective ability to strengthen health systems and better prepare for any pandemic.

Chris Zielinski: What part of a health system can defeat an emerging threat like Ebola? When the latest Ebola crisis flared in Guinea, Liberia and Sierra Leone in 2014, 1) there was no vaccine to administer, 2) there was no palliative or treatment medication to offer. So what can the health system do in such a case, however strong or weak it may be?

As in all of the major new epidemic outbreaks - from HIV/AIDS to Avian Flu, Ebola and Zika - at the onset, the health system typically has only one weapon to hand: knowledge. In the case of Ebola, it was the knowledge that certain cultural practices, and specific hospital and mortuary behaviours, put people at risk of contamination. The only viable initial approach in confronting this emergency was to disseminate information through all media to those at risk, and to send people to share their knowledge face-to-face - while the race to develop vaccines and other treatments began.

As Dr Nkengasong stresses, health systems need strengthening, that's for sure. And universal health coverage starts with knowledge. The component of the health system that needs addressing as a priority is its ability to disseminate and apply information through all media and knowledge face to face.

Joseph Ana: Ownership by practitioners and community is also vital for mass mobilisation of the population to fight epidemics beginning with awareness creation. The stakeholders at the top level are aware of the plans and initiatives for response in epidemics but ordinary folks in the population may not be aware. The implementers in all countries need to cascade the readiness plan and processes to rural, lay, media and professional stakeholders, well before the epidemics strike. Awareness and ownership of readiness plans if they are effectively disseminated as health information, to our understanding was the cornerstone of the success that Nigeria recorded when Ebola struck the country.

Capacity building and training

Anne Brice: In Oxford in the 1990s we ran a programme called the 'Librarian of the 21st Century'... to give librarians and information specialists post-qualification training in change management, teaching and learning, critical appraisal, research methods, negotiation and selling skills amongst other topics. We have worked with AHILA [Association for Health Information and Libraries in Africa] and African librarians to spread this approach over the years, and it has been very successful - but systems and organisations change, and I think we need a new model to make sure that this support, learning, mentoring and leadership is cascaded... I just wondered whether you had considered including the area of learning about systematic review methods in your programme? We are working in PHE to share learning with Cochrane, the EPPI-Centre and others on how to be part of

teams producing rapid reviews, and this is something that the UK Rapid Response initiative is also looking at.

Public Health England

Anne Brice: Here in PHE we are particularly interested in making sure that our knowledge and library team understand how to do SRs, and are seen as an integral part of the review team. This means constantly keeping up to date with developments in methods, as well as understanding the issues relating to how they can be translated into practice.

We act as knowledge brokers for many different types of users and audiences, and can help make sure that people find the best evidence for their questions and context - see Claire Allen's post on the issues in making sure SRs are appropriate for humanitarian relief settings - but this does mean understanding the whole knowledge and evidence cycle. One way to do this that we've used is to get librarians to find and synthesise their own evidence base - this is an area they are more comfortable with, but can then build skills and confidence for using in other areas.

Claire Allen: It was interesting, reading your two posts, the day after Evidence Aid announced its November 2017 training which will take place in London, UK. More information can be found here: <http://www.evidenceaid.org/training-an-introduction-to-systematic-reviews-in-the-humanitarian-sector-london-uk/>

CITATIONS

1. CITATION: Financing of international collective action for epidemic and pandemic preparedness
Gavin Yamey et al.
The Lancet Global Health, Volume 5, No. 8, e742e744, August 2017
DOI: [http://dx.doi.org/10.1016/S2214-109X\(17\)30203-6](http://dx.doi.org/10.1016/S2214-109X(17)30203-6)

This Comment by Gavin Yamey and colleagues summarises the recommendations of a recent workshop held at the National Academy of Medicine, Washington, DC, USA. 'Crucial components of the global and regional system for outbreak control include surge capacity (eg, the ability to urgently deploy human resources); providing technical guidance to countries in the event of an outbreak; and establishing a coordinated, interlinked global, regional, and national surveillance system. These activities are the remit of several essential WHO financing envelopes that all face major funding shortfalls.'

2. CITATION: Region at Risk: The Human Dimensions of Climate Change in Asia and the Pacific

Asian Development Bank. This 131-page report discusses the most recent projections pertaining to climate change and climate change impacts in Asia and the Pacific, and the consequences of these changes to human systems, particularly for developing countries. It also highlights gaps in the existing knowledge and identifies avenues for continued research. Section 3.2 discusses Climate Change and Human Health.
<https://www.adb.org/publications/region-at-risk-climate-change>

3. CITATION: Development of a set of community-informed Ebola messages for Sierra Leone
John Kinsman, Kars de Bruijne, Alpha M. Jalloh, Muriel Harris, Hussainatu Abdullah, Titus Boye-Thompson, Osman Sankoh, Abdul K. Jalloh, Heidi Jalloh-Vos
Published: August 7, 2017 <https://doi.org/10.1371/journal.pntd.0005742>
<http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0005742>

AUTHOR SUMMARY

The work on which the paper is based was conducted in two Ebola "hotspots"™ in Sierra Leone (urban Freetown and rural Bombali district) between January and April 2015. Numerous misperceptions about Ebola had developed in the community over the course of 2014, and it was becoming increasingly clear that the largely top-down messaging strategy in use was not as effective as it could have been. Our project aimed to actively

include the community in the development of a set of actionable Ebola messages that responded directly to their needs and concerns. While developing our messages on such topics as ambulances, burial teams, and the use of chlorine, we derived a set of recommendations that could also be applicable to control efforts relating to other infectious disease outbreaks. These include the importance of listening to community concerns during an outbreak, communicating on a two-way basis using trusted messengers, and engaging with relevant officials throughout the project in order to maximise the likelihood of the findings being utilised. While our work is based empirically on one disease in one setting, the messaging principles that emerged out of it are to a large degree generic.'

4. CITATION: Pluviano S, Watt C, Della Sala S (2017) Misinformation lingers in memory: Failure of three pro-vaccination strategies. PLoS ONE 12(7): e0181640. <https://doi.org/10.1371/journal.pone.0181640>

ABSTRACT

'People's inability to update their memories in light of corrective information may have important public health consequences, as in the case of vaccination choice. In the present study, we compare three potentially effective strategies in vaccine promotion: one contrasting myths vs. facts, one employing fact and icon boxes, and one showing images of non-vaccinated sick children. Beliefs in the autism/vaccines link and in vaccines side effects, along with intention to vaccinate a future child, were evaluated both immediately after the correction intervention and after a 7-day delay to reveal possible backfire effects. Results show that existing strategies to correct vaccine misinformation are ineffective and often backfire, resulting in the unintended opposite effect, reinforcing ill-founded beliefs about vaccination and reducing intentions to vaccinate. The implications for research on vaccines misinformation and recommendations for progress are discussed.'

The authors conclude: 'Presumably, a golden strategy capable of overcoming all the intricacies of setting people straight, regardless of their basic beliefs and/or temporal shifts, does not exist. Public information campaigns may instead benefit from tailoring different, simultaneous, and frequent interventions to increase the likelihood of corrective messages' dissemination and acceptance.'

5. CITATION - CZ: Further to our current discussion on communication in health emergencies, there is an interesting publication recently available for free download here <https://www.ncbi.nlm.nih.gov/books/NBK436241/>

Here is a summary of its contents:

'Building communication capacity is a critical piece of preparing for, detecting, and responding to infectious disease threats. The International Health Regulations (IHR) establish risk communication - the real-time exchange of information, advice, and opinions between experts or officials and people who face a threat to their survival, health, and economic or social well-being — as a core capacity that World Health Organization member states must fulfill to strengthen the fight against these threats. Despite global recognition of the importance of complying with IHR, 67 percent of signatory countries report themselves as not compliant. By investing in communication capacity, public health and government officials and civil society organizations facing health crises would be prepared to provide advice, information, and reassurance to the public as well as to rapidly develop messages and community engagement activities that are coordinated and take into account social and behavioral dynamics among all sectors.

'To learn about current national and international efforts to develop the capacity to communicate effectively during times of infectious disease outbreaks, and to explore gaps in the research agenda that may help address communication needs to advance the field, the Forum on Microbial Threats of the National Academies of Sciences, Engineering, and Medicine convened a 1.5 day workshop on December 13 and 14, 2016, in Washington, DC. Participants reviewed progress and needs in strengthening communication capacity for dealing with infectious disease threats for both outbreaks and routine challenges in the United States and abroad. This publication summarizes the presentations and discussions from the workshop.'

6. Claire Allen: I'd like to bring your attention to a systematic review that Evidence Aid (Mike Clarke, Evidence Aid Trustee and Research Director, and Declan Bradley, Evidence Aid volunteer) was involved in. The review was of communication interventions relevant to disasters, including infection outbreaks. Interventions associated with increased knowledge of preventive measures include individual and group face-to-face information

sessions, telephone calls, delivery of written information, mass media campaigns, mass SMS text messages, and games for children. You can read the full review here: <http://www.evidenceaid.org/disaster-risk-communication/>

Profiles

HIFA profile: Reem Abbas is a PhD student at AUT University in New Zealand. Interest: Essential information for emergency medicine and emergency management personnel during disasters. raa247 AT hotmail.com

HIFA profile: Claire Allen is Operations Manager at Evidence Aid, UK. Professional interests: Evidence Aid (www.evidenceaid.org) provides evidence for people in disaster preparedness and response to make better decisions. Areas of interest = humanitarian crises, natural disasters and major healthcare emergencies (disaster = when a country is unable to cope with the disaster/crisis or emergency). She is a member of the HIFA Working Group on Access to Health Research.

<http://www.hifa.org/working-groups/access-health-research>

<http://www.hifa.org/support/members/claire>

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HIFA profile: Joseph Ana is the Lead Consultant and Trainer at the Africa Centre for Clinical Governance Research and Patient Safety in Calabar, Nigeria. In 2015 he won the NMA Award of Excellence for establishing 12-Pillar Clinical Governance, Quality and Safety initiative in Nigeria. He has been the pioneer Chairman of the Nigerian Medical Association (NMA) National Committee on Clinical Governance and Research since 2012. He is also Chairman of the Quality & Performance subcommittee of the Technical Working Group for the implementation of the Nigeria Health Act. He is a pioneer Trustee-Director of the NMF (Nigerian Medical Forum) which took the BMJ to West Africa in 1995. He is particularly interested in strengthening health systems for quality and safety in LMICs. He has written Five books on the 12-Pillar Clinical Governance for LMICs, including a TOOLS for Implementation. He established the Department of Clinical Governance, Servicom & e-health in the Cross River State Ministry of Health, Nigeria in 2007. Website:

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HIFA profile: Anne Brice is the Head of Knowledge Management for Public Health England, the expert national public health agency with a mission to protect and improve the nation's health and to reduce inequalities. After qualifying in 1983, Anne has had a variety of positions in academic and health libraries, including the University of London, Borders Health Board, and the University of Oxford. She has held a range of national roles, including those with the former National Library for Health, NHS National Knowledge Service, and the Department of Health. Prior to joining Public Health England she was Head of Knowledge Management at Better Value Health Care, and seconded to the NHS Choices commissioning team at the Department of Health. She helped set up CASP International and has worked internationally with a range of partners and colleagues. Anne's professional interests include evidence based practice, professional development, and the information professionals role in facilitating knowledge translation. She is currently undertaking a DPhil in Evidence Based Health Care at the University of Oxford in the area of participant experience in internet-based clinical trials. She is a member of the HIFA Project on Library and Information Services.

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HIFA profile: Bob Gann is a digital health consultant, specialising in digital health strategy, partnerships & stakeholder engagement, and digital inclusion. Bob is currently working as Digital Inclusion Lead on NHS Digital's Widening Digital Participation initiative, reducing inequalities in access to digital health. He is also a Specialist Advisor in Digital Health to the Care Quality Commission in England. Internationally Bob is consultant to the National Opinion Research Centre at the University of Chicago in the USA and is a member of the World Health Organization e-Health Advisory Group. Previously in his career Bob qualified and worked as a healthcare librarian, and was Director of Strategy & Partnerships at NHS Choices and Director of New Media at NHS Direct. He is Visiting Professor in Health Informatics at Plymouth University. He is a member of the HIFA working group on Library and Information Services.

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HIFA profile: Jackton L Kaijage, M.Lib. (Information Systems and Services for Health Care), PG Dip. in Librarianship (University of Wales, Aberystwyth, UK), B.Ed. (Teachers' Education) (Hons.) (University of Dar es Salaam, Tanzania), Grade IIIA Teaching Certificate (Morogoro Teachers' Training College, Morogoro, Tanzania). Jackton Kaijage is the CEO and Sole Proprietor for the Jackliv Events Management Services in Dar es Salaam, Tanzania. We are licensed to offer: multimedia printing, publishing and recording services; business consultancy services; and conference and catering services and supplies. He was the Chief Librarian, on contract basis between March, 2014 and February, 2016, at Kibaha Public Library, Directorate of Education Services, Kibaha Education Centre (KEC). He still offers English-Kiswahili-English Translation services. He has began writing Kiswahili eBooks on diverse basic life skills including, basics of entrepreneurship targeting specifically struggling Kiswahili speaking SMEs; basics of success from the Biblical view point etc. Besides that, he is very active on the Facebook and LinkedIn. He is a HIFA Country Representative for Tanzania.

HIFA profile: Mulenga Lwansa is a Pharmacist based in Zambia. Being a Pharmacist of many years, Mulenga has observed over the years how attention has shifted from this area to other much more immediate and deadly diseases like HIV/AIDS. lwansa AT yahoo.com

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