ST5.2.2

TELL ME Conference Report

2nd Reporting period
WP5 Dissemination and Policy Dialogue

Responsible Partner: ZADIG
Contributing partners: -

Dissemination level: PU

TELL ME - Transparent communication in Epidemics: Learning Lessons from experience, delivering effective Messages, providing Evidence.
Project co-funded by the European Commission within the 7th Framework Programme – HEALTH theme

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Annex List

1. Introductory notes

This report presents an overview of the TELL ME Final Stakeholder Conference that was held in Venice, on the 4th and 5th December 2014. The TELL ME conference was the conclusive event in a series of networking activities and events organised within the scope of Work Package 5: Dissemination and Policy Dialogue, with the aim to present useful communication tools and products that can have a positive impact in the field of public health communications, in response to the emergent trends of vaccine refusal and the relatively low adherence to non-pharmacological protective measures among different population segments.

The TELL ME project set as an overarching goal to develop an evidence-based communication package for improved risk and outbreak communication; an array of theoretical models and practical tools to support health officials and agencies to plan communication policies and strategies for future infectious disease outbreaks, epidemics or pandemics. The TELL ME outcomes and end-products are encapsulated below, as these constituted key objectives from the beginning to the later stages of the project:

- Collection and assessment of evidence about population behavioural responses to infectious disease outbreaks, and ways in which different types of communication can influence human behaviour.
- Identification and evaluation of new communication challenges and methods for effective communications across different population segments and stakeholders.
- Development of a new participative model for risk communication to support public health authorities to secure an optimal level of preparedness for infectious disease threats.
- Development of an online (e-learning) course for primary care staff and healthcare workers.
- Development of the TELL ME Communication Kit, a series of guidance documents that offer new communication strategies and evidence-based approaches on critical issues relevant to risk and outbreak communication.
- Development of a simulation model prototype to simulate the actions and interactions of autonomous decision-making entities in the course of an influenza epidemic.

In addition to the presentation of the TELL ME end-products to a diverse audience of stakeholders, the TELL ME conference aimed at providing a forum where experts and representative stakeholders could openly discuss various issues, concepts, ideas, and form partnerships toward an effective response to future infectious disease threats. In such a context, the TELL ME consortium wished to extend collaboration with other EU-funded projects and initiatives (e.g. ECOM, ASSET) to create a broad community of experts where knowledge could be shared and unique viewpoints could be expressed.

As a final remark, it should be noted that the TELL ME conference was organised at the peak of the Ebola epidemic in West Africa and the period when the first cases were reported in Europe and the US. As anticipated, critical communication aspects and other issues relevant to international response to the Ebola epidemic, also constituted one of the central themes of the TELL ME conference.

2. Pre-conference activity

This section presents a brief overview of the activities and procedural steps carried out with regards to scientific and organisational aspects of the conference. The date and venue of the TELL ME conference was decided after a consortium meeting held in Rome, on 5-6 May 2014. The selection of the city of Venice as a location had several symbolic extensions in relation to the TELL ME project. For centuries, Venice was the hub of many trade routes into central Europe and was marked by a series of plague epidemics which unfolded between the 14th and 16th century. At present, the Veneto region is the only region in Italy where immunisation in not mandatory by law. In addition, Venice is an example of a modern-day city where representations and folkloristic elements from past epidemics have a dominant role in society, such as the famous Venice carnival *plague doctor* mask or the religious procession of the *Santa Maria della Salute* on 21st November each year, to commemorate the deliverance of Venice from the plague of 1630 and 1631.

2.1 Drawing up the agenda

The conference agenda was drafted by Zadig Srl, as responsible partner for the organisation of the event, in close collaboration with Prof. Manfred Green, University of Haifa, the TELL ME scientific coordinator and appointed Chair of the conference. In accordance with the objectives set out from the beginning of the process, the initial format of the conference was structured around the presentation of TELL ME findings and end-products, the presentation of other EU projects and initiatives, and the involvement of high-level experts in the field of risk and outbreak communication to reflect on how could theoretical concepts and approaches be put into practice with regard to infectious disease threats of international concern.

The 2014 Ebola epidemic which broke out and spread in multiple countries of West Africa, with reported cases in several other countries around the world, received special attention by the TELL ME consortium and at a second phase steps were taken in the direction to organise a session specific to the communication aspects and behavioural responses to the Ebola epidemic at national and transnational level. Accordingly, this required to tailor the conference agenda and establish some links between the TELL ME end-products and their potential to find practical application in response to the Ebola epidemic.

The revised agenda was circulated to the TELL ME consortium for any further suggestion and improvement and final approval before external speakers and stakeholders were invited to the event.
It was agreed for the conference to unfold in two days. The welcome event (Day 1) offered an excellent opportunity for networking activities, while the keynote speech given by Prof. Karl Ekdahl, *Head of Public Health and Communication at the European Centre for Disease Prevention and Control (ECDC)*, set the tone for the conference where several issues around the communication of risk were presented with reference to the Ebola epidemic. The TELL ME conference (Day 2) was structured around 5 thematic sessions, with various perspectives and issues of risk communication being presented, from theoretical concepts and critical aspects to practical implications and strategies in response to infectious disease outbreaks.

The final version of the TELL Me conference agenda, which includes the biographical notes of speakers and more information about the conference, can be seen in **Annex I**.

2.2 Setting the scene for the conference

A principal goal for the TELL ME conference had been to bring together various representatives from identified stakeholder groups in the field of public health and risk communication, seeking to create the necessary conditions for unique viewpoints to be expressed and fruitful discussions to take place in the course of the event. More specifically, the target audience included policy makers, communication officials and representatives from public health authorities that operate at international, national and local level, healthcare providers, non-governmental organisations and the media.

A wide array of sources and channels were utilised for the announcement of the TELL ME conference. These included notifications via partner organisations' newsletters and websites, announcements through CORDIS and other web portals, and mobilisation of networks of stakeholders listed in the TELL ME directory of stakeholders, which includes more than 600 contacts. Over 200 individuals/representatives from various stakeholder groups received a formal invitation to the conference via email.

Besides the abovementioned external communication channels used for the announcement of the event, the TELL ME project press centre released in October 2014 a special newsletter about the forthcoming TELL ME conference and launched a social media campaign to raise awareness about the event and invite key stakeholders to register online for attending the conference, via the dedicated TELL ME conference web portal.[1]

The TELL ME conference web portal was established as online as a useful resource for scientific, technical and organisational aspects of the conference. The main sections that comprise the TELL ME conference web portal include:

- About the Conference
- Registration Form
- Scientific Programme
- Poster Sessions
- About the Speakers
- Accommodation
- Venue / Locations
- Recordings

[1] TELL ME Conference webpage accessible at <http://www.tellmeproject.eu/node/332>

2.3 Participation

A wide spectrum of representative stakeholders and risk communication experts attended the TELL ME conference. A total of 61 stakeholders attended the conference from 14 different countries, including representatives from various stakeholder groups at local, national and international level. The participants list can be seen in **Annex II**.

Twenty-two representative stakeholders completed the online registration form expressing their interest to participate in the conference, while another 13 stakeholders and experts in the field of risk communication responded positively to direct formal invitations sent by the organisers of the event. The participation of representative stakeholders who operate at local, national and international level was integral for the success of the TELL ME conference, since this polyphony could ensure that diverse risk and outbreak communication issues would be approached from multiple angles.

The TELL ME consortium was fully represented by all scientific partners and WP leaders, namely the *University of Haifa* (Israel), *University of Surrey* (UK), *Vrije Universiteit Brussel* (Belgium), *British Medical Journal Publishing Group* (UK), I*stituto Superiore di Sanità* (Italy), *European Union of General Practitioners* (Belgium), *Latvian Centre for Human Rights* (Latvia), *National Disaster Life Support Foundation* (USA), *CEDARthree Ltd.* (UK), *Zadig Srl.* (Italy).

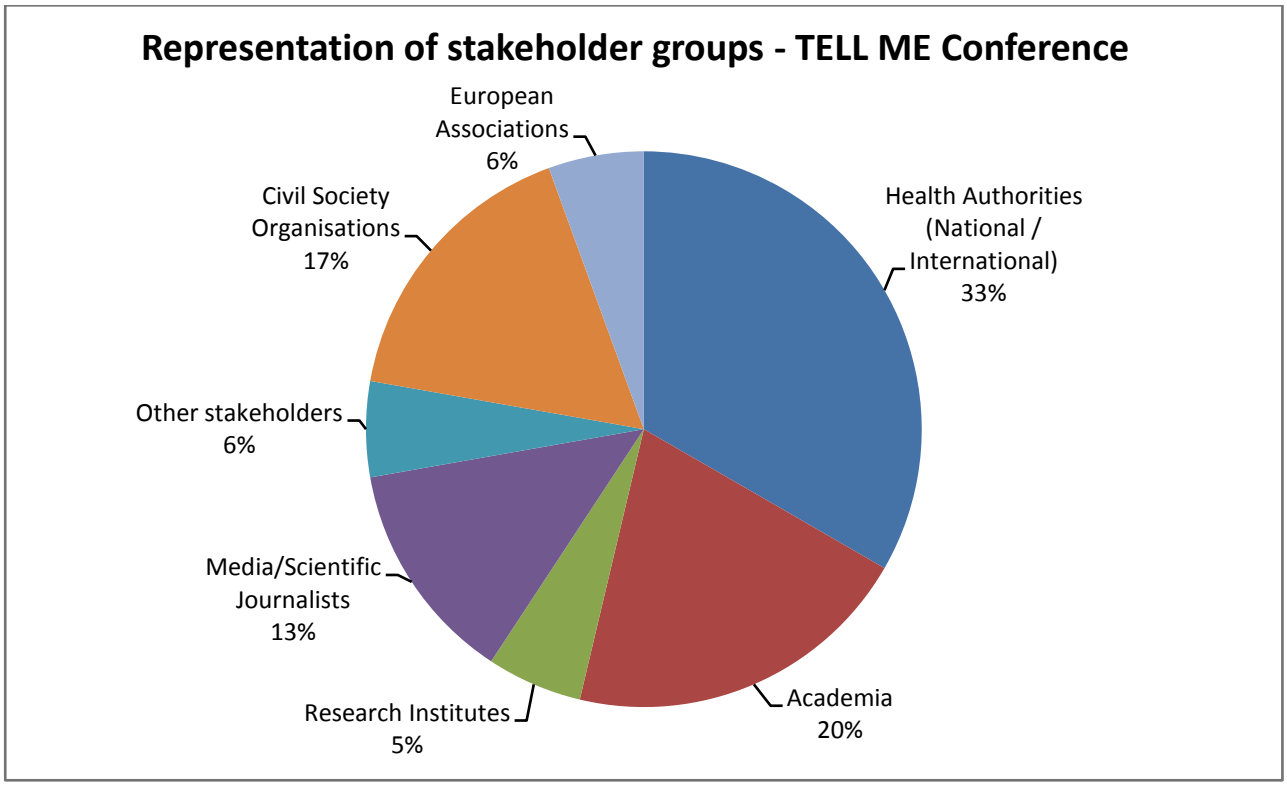
Moreover, the TELL ME External Advisory Board (EAB) had presence in the conference, the members of which contributed significantly in different phases of the project and played an instrumental role in the validation and deli very of the TELL ME end-products. The EAB members who were present with their professional capacity as representative stakeholders and speakers in the conference include: *Prof. Karl Ekdahl* (ECDC), *Dr. Pier Luigi Lopalco* (ECDC), *Prof. Bernardino Fantini* (University of Geneva), *Mrs. Moya Wood-Heath* (Community Resilience UK).

As mentioned already, one of the core objectives and main ambition for the TELL ME conference had been to reach out and create synergies with other EU-funded projects in the field of communications and public health threats, so that experiences and knowledge could be shared toward a comprehensive approach in response to infectious disease outbreaks. Representative partners from three European projects (ECOM[2], ASSET[3], PHEME[4]) participated in the conference in the context of a session dedicated for the presentation of these projects.

Based on a broad categorisation of stakeholders, the conference was attended by representatives from local, national and international public health authorities (33%), academia (20%), civil society organisations (17%), media and scientific journalists (13%), European associations (6%), research institutes (5%) and other stakeholders (6%). It is important to note that the wide participation of representatives from various stakeholder groups within the frame of the TELL ME conference created an interactive platform where

[2] **ECOM:** Effective Communication in Outbreak Management. More information at <http://www.ecomeu.info/>
[3] **ASSET:** Action plan on Science in Society related issues in Epidemics and Total pandemics. More information at <http://www.asset-scienceinsociety.eu/>
[4] **PHEME:** Computing veracity across media, languages and social networks. More information at <http://www.pheme.eu/>

everyone had the opportunity to share and learn about the efforts, challenges and approaches made at international, national and local level on the front of preparedness and response to infectious disease outbreaks.



2.4 TELL ME promotion material

A collection of items was conceived and developed especially for the TELL ME conference for the wider promotion of the "TELL ME" brand. All participants who attended the TELL ME conference also received upon registration the following three items:

- 1 conference bag
- 1 conference agenda
- 1 "TELL ME" pen

3. Conference notes

The report continues to provide a summary of the conference presentations and discussions that followed during the two days of the TELL ME conference. All presentations are available in PDF format and directly accessible via the TELL ME conference webpage at http://tellmeproject.eu/node/338.

3.1 Day 1: Thursday 4th December 2014

3.1.1 Welcome and opening speech

The conference chair and scientific coordinator of the TELL ME project, ***Prof. Manfred Green***, opened the conference by addressing a warm welcome to all participants and specially thanked the former scientific coordinator, ***Dr. Emilio Mordini***, for the conception of the TELL ME project. Next, it was explained that TELL ME has reached the last phase where there is a need to make a shift from theoretical concepts developed as part of the project to practical implications and aspects associated with infectious disease crises of global concern.

The TELL ME consortium was presented by Manfred, with brief comments on the areas of contribution for each partner. The central question for TELL ME was then introduced, which encapsulated for participants the rationale behind the project:

> *"What was the **communication gap** during the 2009 H1N1 outbreak between global and local health organisations and the public, which led to **immunisation non-compliance** and **a sense of mistrust and lack of transparency**?"*

In an effort to provide more context for participants who were not as familiar with the TELL ME project, Manfred presented the various elements that comprised TELL ME and highlighted key issues in risk and outbreak communication, which were addressed in the scope of the scientific work carried out in the life-cycle of the project. There was a brief introduction for some of the main end-products for the project, including the TELL ME web portal, the framework model for outbreak communication, the TELL ME communication guide, the agent-based simulation model and the online course for primary care staff.

The opening speech was concluded with a mention of the central themes and areas of consideration for the TELL ME conference, such as how communications be more effective between different groups of stakeholders, how could we ensure that messages reach the target population, how could we better engage with the public, how could panic be avoided, and how could we could secure transparency and trust as core elements in the communication process?

As explained by Manfred, it was envisaged for these questions to form the basis for discussions in the following day of the conference. Following this comment, he wished everyone to enjoy the conference and invited ***Dr. Francesca Russo***, *Head of Unit for Promotion and Development of Hygiene and Public Health of the Veneto Region,* to take the floor for her welcome speech.

Francesca welcomed participants to the TELL ME conference and the city of Venice, as a local representative. It was emphasised the fact that at present the Venice Directorate for Public Health concentrates efforts on communication aspects in relation to health workers and primary care staff, and from this perspective the TELL ME project appears to be particularly important. As it was noted by Francesca, the Veneto region invests efforts and resources for the training of health workers and education of citizens, in order to maintain trust with public health authorities and effectively address issues raised by the anti-vaccine movement, so that everyone can make an informed decision about immunisation.

3.1.2 Keynote speech

This session and Day 1 of the TELL ME conference was concluded as scheduled with the keynote speech delivered by ***Prof. Karl Ekdahl***, *Head of the Public Health Capacity and Communication Unit at the Centre for Disease Prevention and Control (ECDC)*, on risk communication aspects of the more recent Ebola epidemic. The point of departure for this presentation was based on the observation that two viruses have been spreading in the past few months: the Ebola virus and the *media virus*. As explained by Karl, the *media virus* largely affected public concerns and perceptions, and influenced public health authorities' response to the epidemic.

It was demonstrated that the correlation between the actual threat and the perceived risk was determined by the level of exposure and representation of the Ebola virus in the media as the outbreak unfolded in time. More particularly, while the number of reported cases continued to steadily increase since May 2014, a fluctuation was noted with regards to the level of attention the Ebola virus received by the media, across different periods of the epidemic. This "attention gap" between the cumulative cases in West Africa and the level of interest or alarm raised by the media, was associated to the characteristics of the virus which from the one hand was cynically perceived as a distant problem that could not pose a threat for the Western world, while on the other hand this epidemic comprised the right ingredients to make a good media story.

Five distinct phases were identified in the course of the epidemic, where the level of media coverage determined to a considerable extent the response to the Ebola virus and influence public perceptions. Below are presented the five phases and identified communication challenges for each phase:

Phase	Status	Specific communication challenge
Phase 1: **Ignorance**	• Ebola virus taking off – media virus still dormant • Few lone voices (MSF) from the field: - ”something else than previous oubreaks” • Scary pictures from the field, but perceived as ”just another African event” • Very little ”emotions”	• Put Ebola on the agenda: Awareness raising aimed at public health experts, policy makers and donors
Phase 2: **Waking up**	• Ebola virus spreading quickly – short flare of media virus • WHO declares Public Health Event of International Concern • Increasing awareness of Ebola as major regional epidemic • Still perceived as an African issue of little concern to the US and Europe	• Educational: what is Ebola, what are the implications regionally and globally • Advocacy for funding

Phase 3: **Distant interest**	• Ebola virus spreading exponentially – media virus slowly spreading
	• Increasingly more desperat calls from public health actors broadly for urgent action and political attention
	• Waning public interest
	• Media focus on:
	  ○ New alarming figures
	  ○ First signs of fear in West
		• Awareness raising among donors and aid providers
		• Risk reassurance to European public

Phase 4: **Hitting the West**	• First imported case • Secondary cases in Spain and Texas • Ebola virus continue to spread exponentially – media virus exploding • Epidemic of fear out of any proportion • In the US a clear political dimension	• Getting risks into proportion • Curbing public fear in Europe/US while keeping attention on Africa
Phase 5: **Fatigue**	• Ebola virus continues to spread exponentially – media virus wanes • US elections over • Less sensational media articles • Fear among public subsides • Continued fear among frontline medical staff	• Keep awareness up to ensure support to West Africa • Educate frontline staff on risks and appropriate protection

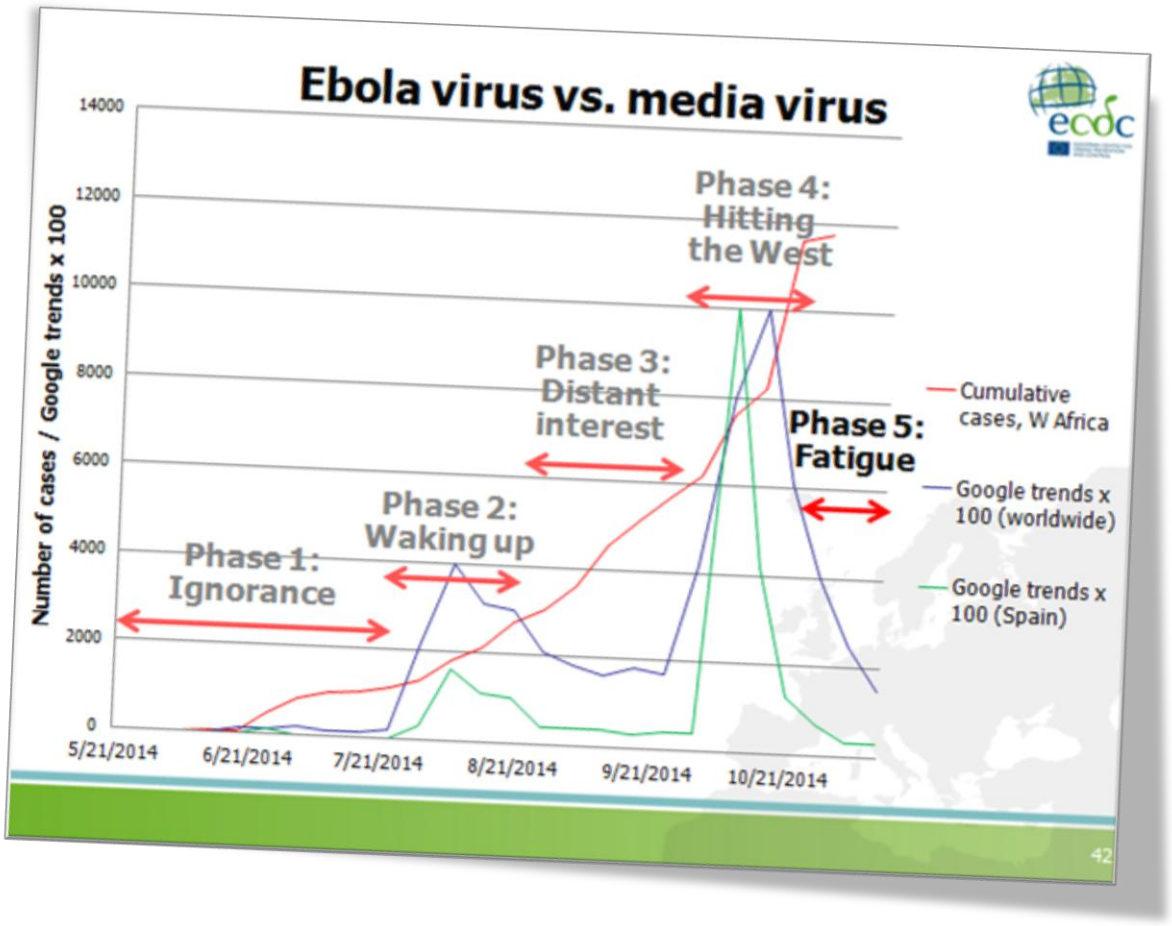
According to Karl, the main communication challenges in relation to the Ebola epidemic, from an institutional point of view, are as follows:

#1: *How to raise awareness to ensure proper action at source while at the same time reassuring European poulations?*

#2: *How to explain that the West African situation could not be repeated in Europe?*

#3: *How to make frontline European health care staff understand that the risks (and PPE) for intensive care of severely ill ebola patients may not be the same as when first assessing a slightly symptomatic patient that has been in africa?*

#4: *How to show leadership?*



The following conclusive points and observations were provided by Karl on the Ebola epidemic:

- As any crisis, the Ebola epidemic has its own challenges and dynamics that is impossible to predict.
- When national and international communication objectives are counterintuitive, the national objectives will always prevail.
- Trying to portray leadership when there is none, is destined to fail.
- Old communication lessons still hold on:
    - Build trust: Capability – Reliability – Authenticity
    - Communicate early but acknowledge uncertainties
    - Be fact-based and transparent
    - Communication starts with (true) leadership: Lead rather than follow

Following the conclusion of the presentation, the floor was opened for any comments from the audience.

***Dr. Donato Greco**, Zadig Srl*, noted that the case of the Ebola epidemic is yet another example of how challenging can be the communication of risk, despite the considerable improvements made on the tactical framework for outbreak communications at institutional level. As indicated by Donato, similar to the HIV epidemic, the Ebola virus emerged in rural areas but spread beyond borders to take over towns and cities. This means that more efforts are required to communicate effectively and better equip local populations with knowledge to prevent the spread of infectious diseases, before it turns into an outbreak.

***Prof. Manfred Green**, University of Haifa*, agreed to this important point and further highlighted the need to put in context and discuss the practical aspects of risk and outbreak communication on the second day of the conference.

3.2 Day 2: Friday 5th December 2014

The second day of the TELL ME conference was split into five thematic sessions, with the aim to better focus discussions around the topics and issues presented in relation to risk communication, from both a theoretical and practical point of view.

- **Session 1:** Theoretical concepts and critical aspects in public health crises
- **Session 2:** The TELL ME approach to risk and outbreak communication
- **Session 3:** Perspectives from EU projects on outbreak communication and the healthcare context
- **Session 4:** Emerging plagues in the 21st century – The case of the Ebola epidemic
- **Session 5:** Risk communication to prevent and protect against infectious disease outbreaks

3.2.1 Session 1 | Theoretical concepts and critical aspects in public health crises

The first session of the conference aimed to provide some context and prompt discussions over some theoretical concepts and critical aspects that are central in risk management and risk communication. After a short introduction by the chair of the session, ***Dr. Francesco Zambon** (WHO)*, who talked about the era of the Black Death in Venice and the effects that survive in modern times, the floor was given to Prof. Bernardino Fantini to deliver the opening speech of the session.

Prof. Bernardino Fantini
Geneva Medical School / WHO Collaborating Centre for the Historical Research on Public Health
Title of presentation: *"Figures of fear and empathy: Perception of epidemics and representation of the behavioural responses to them in literature, art and music."*

This presentation focussed on artistic representations of epidemics in the past as well as the role and influence of emotion in a historical continuum, which can determine public perceptions and assist in the evaluation of political, social and economic determinants and response to future epidemics. In his speech, Bernardino suggested that emotions play a critical role in outbreak communications since people's attitudes and behavioural response is rarely based on reason, with the example of an inherent tendency to over- or under-react to a situation, depending the circumstances. Bernardino proposed that an effective communication strategy must take into account the emotional status of individuals at the time of a severe outbreak, and efforts should be made to combine the two elements of reason and emotion.

Next, Bernardino presented examples of use of metaphoric images from the Ebola epidemic to highlight the fundamental role that images and symbols in the emotional response to an outbreak, which can have a different effect in behavioural responses depending on the symbolic messages these metaphors convey for people. Particular reference was made on the power of the image or depiction of a reality and attached symbolisms for the public, with examples

from the 16th century bubonic plague epidemic and the Ebola epidemic, where in both cases the dominant themes have been the collectors of corpses and the particular type of protective uniforms used by medical staff.

To explain in more detail the role of emotions in epidemics, Bernardino continued to present the four main families of emotions (Fear, Grief, Hope, Empathy), and associated manifestations for each emotion. It was demonstrated that different emotions evoke different attitudes and behavioural responses (e.g. fear leads to abandonment and stigmatisation, empathy produces solidarity and resilience).

For the final part of his presentation, Bernardino showed a number examples from the literature, architecture, art and music from the period of the "Black Death" epidemic to demonstrate the way artistic representations could be used as powerful communication tools to elicit and control the emotions of the general public.

Question 1: *How could we explain the role of emotions to scientists, whose arguments need to be based on evidence instead of the "irrational" dimension of emotions? (Michele Bellone, Zadig Srl)*

In communication, the emotion needs to be taken into account in all circumstances, for both the sender and recipient of the message. It is an erroneous belief that the role of emotion is not supported from scientists since there is a considerable amount of studies conducted by psychologists, anthropologists, and neurobiologists about the role of emotions in communication. It is important to consider that in every decision we make, there is present the element of emotion. To this end, a practical suggestion would be for communicators to always consider the emotional implications of messages produced.

Question 2: *Why do you think that fine arts have a focus on the communicable diseases to elicit emotions, rather than the non-communicable diseases? (Francesco Zambon, WHO/Regional Office for Europe)*

The main reason is that artistic representations were produced in a period before the epidemiological transition, where infectious diseases was the leading cause for children and adults. Furthermore, a chronic disease is a slow process which could not be depicted easily in arts. However, we see that chronic diseases receive more attention in modern times, as these are constitute themes in films and literature.

Mr. Kåre Harald Drager
The International Emergency Management Society (TIEMS)
Title of presentation: *"The role of risk communication and education and training in building resilient communities."*

The next presentation was delivered by the president of TIEMS, who offered insight from the perspective of an international non-governmental organisation for emergency and disaster management. Harald opened his presentation with an analysis of what constitutes "risk" in the modern world and further specified which are the major challenges for risk communication, in a context of a reality where everything is inter-related from the climatic changes to the increase of population density and technological risks.

It was emphasised by Harald that local, national and international emergencies have different effects on people, which can be emotional (e.g. fear, anger), cognitive (e.g. impaired concentration and decision making), physiological (e.g. fatigue, arousal) and interpersonal (e.g. stigmatisation, blame). Such effects can be the result of poor communication and therefore is important to address these by following a number of steps from the selection to the implementation and evaluation of a communication strategy, with continuous involvement of interested and affected parties in the process. Moreover, it was suggested that

to achieve effective communications with the public, it requires from decision makers and communicators to pose some crucial questions to themselves from the onset of an emergency, as well as to take into account various contextual and situational factors, such as demographics, type of emergency and other parameters.

Finally, a number of observations were made by Harald in relation to the Ebola epidemic, where he emphasised the crucial role and benefits of education and training for risk communication, and the fact that *all* stakeholders need to be trained. Moreover, it was highlighted that there is a necessity for authorities, healthcare professionals and the general public to establish a framework of communications that will be based on scientific grounds and will be sensitive to the local context and social infrastructure.

Comment 1: *We should consider that it becomes more and more difficult for people these days to accept the presence of risk in society, with the progress of science and technological developments (Manfred Green, University of Haifa).*

Mr. Simon Langdon
CEDARthree Limited
Title of presentation: *"Are risk and trust related in a public health emergency? Who will you trust?"*

Simon opened his speech by expressing a consideration that "*…there's so many variables that contribute to trust and so many variables that influence the perception of truth, so who will you trust?*". Attention was called to the fact that where trust ends, uncertainty may follow so we need to be ready for the unexpected at all times, especially in the field of crisis management.

Following these introductory remarks, Simon presented the key aspects that make up *trust* in the case of an infectious disease outbreak, with more emphasis put on the need to keep messages consistent. Also, various aspects that may lead to *distrust* were discussed such as inconsistencies among experts, negative media reporting and systematic neglect or ignorance of public concerns, under the prism of the information mismatch that may occur at the early phase of an outbreak, where there is an information gap and timely decisions need to be made without knowledge of all the evidence.

Next, the audience was presented with a description of a standard crisis management process, where information obtained from various stakeholders and emergency teams is absolutely crucial for the successful implementation of the action plan, which needs to be constantly reviewed and updated in the course of a crisis, on the basis of feedback made available by the stakeholders. Additionally, Simon described that crisis communications are performed at three different levels – strategic, tactical,

operational – and presented a model which could be implemented as such at international, national or local level. Emphasis was put on the fact that people from the local community are the most suitable to deliver the message, as they understand better the culture and needs of local populations. The presentation was concluded with a description of a set of different actions and strategies for effective communications in different phases of a pandemic.

Question 1: *In the field of crisis management, there's a variability of factors depending on the type of the emergency. How do you adopt the crisis management model to different emergency situations? (Francesco Zambon, WHO/Regional Office for Europe)*

You need to start with a generic process and plan, as it is important to get the basics first. For specific situations there is a need to produce tailored material such as the various checklists, however is crucial to keep the plan at a generic level which can be adopted in different emergencies and at different scales.

Question 2: *How you felt about the WHO response to Ebola, with the development of an action plan to deal with the epidemic? (Anne Gulland, British Medical Journal)*

I think it is getting better and better, especially the presence of the internet allowed interested parties and stakeholders at local and regional level to have a direct take on what the actual status is and what measures are taken by international organisations, such as the WHO. Standardisation has been an issue, since different nations and different cultures have their own mechanisms, operating in different contexts.

Question 3: *Considering the importance of message consistency in outbreak situations, how can we deal with the problem that national governments may take actions that undermine the messages produced by the WHO? (Nigel Dowdall, Civil Aviation Authority)*

I think there's no simple answer. There is a need to create more space for dialogue between representative stakeholders from the wider spectrum of society, as suggested in TELL ME. This would require to combine top-down and bottom-up approaches, so that considerations and particular concerns could be openly expressed in a stakeholder meeting, and responsibilities could be allocated for each stakeholder group.

Mr. Paul Quinn
Vrije Universiteit Brussel (VUB)
Title of presentation: *"Stigmatisation and discrimination: The inevitable social companions of public health crises."*

The final presentation for this session had a focus on the issues of stigmatisation and discrimination in international public health crises, which has been a point of concern also in the case of Ebola epidemic. Paul opened his speech by providing some theoretical context about the cognitive and sociological components of stigma and further explained the conditions under which it can arise. Paul suggested that depending on the cultural context and popular beliefs, certain cognitive elements can either accentuate or attenuate impulses that may lead to stigmatisation. However, this could be reversed through education or experience where people learn that some of their fears are unsubstantiated and therefore can reduce stigmatisation. Specific to infectious diseases, a point was made about the fear of stigmatisation and people's hesitance to disclose they have been infected with a virus so that they can avoid to be the victims of stigmatisation.

The concept of discrimination was also addressed in the context of Paul's speech, where it was stated that similar to stigmatisation it involves stereotyping and although some forms of discrimination are prohibited by law, it may as well create problems in the public health context. Paul explained that both stigmatisation and discrimination commonly occur in epidemic contexts where the fear of infection stimulates powerful affective responses, while in the case where an information vacuum exists, an array of stereotypical views can emerge toward the more vulnerable groups of society.

Some practical examples of stigmatisation and discrimination which occurred in the context of recent epidemics and pandemics (i.e. SARS, H1N1, Ebola) were presented next by Paul, on the basis of his work carried out for the TELL ME project. Moreover, the negative effects of stigmatisation were emphasised both at individual level (e.g. treatment avoidance, denial) and societal level (e.g. marginalisation of vulnerable groups). The importance of consultation with stakeholders and community representatives was highlighted once again in the context of Session 1, and some practical points were offered to avoid unnecessary stigmatisation (see below).

Before	During	After
Intervention in planning stages prior to epidemic events can be used to avoid potential stigmatisation. Many myths can be debunked during before and after an epidemic has begun.	The decisions of public health authorities to pursue certain courses of action should be explained with adequate reasoning in order to avoid incorrect conclusions being drawn that could lead to stigmatisation.	Where stigmatisation occurs it should be examined after the crisis has subsided so that lessons can be learned and plans made to avoid similar problems during future epidemics.

Question 1: *The element of "empathy" has been central in the other presentations of Session 1, as it constitutes a powerful tool for communication and can be distinguishing characteristic of "leadership". Do you think that empathy could be an important element also in the battle against stigmatisation and discrimination? (Thierry Mertens, World Health Organization)*

This is particularly relevant in the case of community representatives who are able to relate more with the issues and concerns of their people, and therefore any expression of empathy from their side would be expected to have a positive impact.

3.2.2 Session 2 | The TELL ME approach to risk and outbreak communication

The second session was geared towards presenting the main outputs and end-products that were developed as part of the TELL ME project, to a diverse audience of stakeholders who were present in the conference. This session was chaired by ***Dr. Luca Carra*** (Zadig Srl) who explained that the TELL ME products, tools and prototypes comprise a package for risk and outbreak communication that could find direct application to real-life situations.

Dr. Anat Gesser-Edelsburg
School of Public Health - University of Haifa
Title of presentation: *"A new framework model for outbreak communication"*

This presentation provided an overview of the *TELL ME framework model for outbreak communication*. The framework model provided the theoretical basis for the development of some of the end-products in TELL ME and is representative of the concepts that have driven the project.

Anat opened her speech with an observation that even in present times the tactics for outbreak communication are based on outdated theories and models, where the information flow remains unilateral as organisations still follow a top-down approach in their communications. It was noted that WHO textbooks still call for "engagement" of the public, a concept which still reflects a passive audience that needs to be engaged, when the social media revolution has actually transformed the public into a *partner*, and not merely the recipient of the message.

Following these introductory remarks, Anat presented a visual representation of the framework model, and explained that one of the innovative aspects has been the idea to position the public sphere at the heart of the model and the centre of communications. The various components of the framework model were analysed, starting from the need for *public segmentation* to provide tailored messages by taking into account the various socio-economic, cultural, educational and other contexts, which could determine the success of a public health intervention. As suggested in the framework model, each nation should move in the direction of establishing the population profiles by conducting systematic research.

The core components that comprise the framework model were analysed, which include the social and mass media, formative evaluation and research, opinion leaders and the various stakeholder groups which openly interact with each other. The role of each component was discussed in relation their potential impact at different phases of an infectious disease outbreak, and popular misconceptions were presented with regard to communications. Anat concluded her presentation by highlighting that the principal goal for the proposed framework model had been to integrate various concepts and theories into a model of practical value for public health officials and communicators.

Question 1: *"There's a set of facts that form the basis for a message to be developed, so if we talk about consistency of messages then perhaps it contradicts that the "one size fits all" approach is a misconception." (Simon Langdon, CEDARthree)*

The model supports the idea that in order to get the message through, so you have to feed tailored information to different sub-groups according to their needs, in order to have the desired results.

Question 2: *"Communicating scientific uncertainty to the public is a very delicate issue. How do you think uncertainty should be communicated?" (Toby Merlin, Centers of Disease Control and Prevention)*

The public needs to have the entire picture when there is an outbreak, even if the picture includes uncertainties, in order to make informed decisions about how to respond.

Mr. Alexander Talbott

Representing British Medical Journal Publishing Group (BMJ)

Title of presentation: *"The role of social media in risk communication for healthcare professionals."*

This presentation looked to summarise some of the lessons learned from the 2009 H1N1 pandemic, providing real life examples of social media use in risk communications, before considering the skills and knowledge healthcare professionals need to use social media in an efficient way for risk communications. Additionally, part of Alex's presentation was dedicated to the *TELL ME Communication Kit* and the guidance documents, since *Mr. Dimitris Dimitriou (Zadig Srl)* could not be present in the TELL ME conference due to unforeseen circumstances.

Alex opened his speech by providing a broad definition for social media, described as "*network-based communication platforms that enable two-way communication, independent of position, location, gender, age or education*", and noted that these platforms enable the build up of dense networks between profiles; which in turn coalesce around topics of interest to form communities. These communities are highly dynamic and may last a matter of minutes or persist for years at a time. In the sphere of public health, it was suggested by Alex that healthcare agencies and professionals are no longer the sole provider of information to media outlets and the public. Healthcare professionals are now competing with a multitude of individuals and groups online to get their information across to their audiences.

The presentation continued to provide some examples about the use, impact and open avenues for social media in the field of public health. It was presented the power of social media users to spread a health message and share information with a much wider audience than can be reached by national organisation for public health. According to Alex, the tone and language used to accompany the message play a crucial role in the decision to relay a message to others. In another example, Alex showed the influence and power of online hubs in the quick dissemination of messages, which however work the same in the spread of rumours and misinformation. It was suggested that online information should always be approached critically and be challenged by the users.

In the final part of this presentation, some considerations were discussed in relation to the use of social media for monitoring purposes. Alex argued that by monitoring what is said during an outbreak, an organisation needs a standpoint on what to do when it encounters a rumour online (via a member of staff). Some further questions were posed, such as what privacy issues may healthcare professionals come across, or where should healthcare agencies draw the line between monitoring those who are infected or at risk and those who are not? Alex concluded that monitoring should not be left to just a national organisation to "oversee" online chatter, but should be used across a healthcare system to ensure local and national issues are captured.

The presentation ended with the introduction of the TELL ME Communication Kit and the four guidance documents that comprise this kit, which present new communication strategies for healthcare professionals and agencies, sub-populations and institutional actors, including a set of practical recommendations and tools for communication in the event of a major infectious disease outbreak.

Question 1: *How you think the process of standardisation can materialise for social media, in a similar fashion as the institutional websites, so we could inform those people who rely only on social networks to receive their information. (Alberto Tozzi, Pediatric Hospital Bambino Gesù)*

It should be stressed that social media is not the death of the website, which remains the primary source to retrieve any information – social media simply link back to this information. However, it requires a clear strategy about who provides information in the event of an outbreak. The website is a very important source of information and needs to be updated regularly. We should not forget the element of "personality" for social media, so communication needs to be less institutional from the side of health organisations.

Dr. Roberta Villa
Zadig Srl.
Title of presentation: *"Online course for healthcare professionals for communications in epidemics."*

In this presentation, the o*nline course for primary care staff* was introduced to the audience as an end-product of the TELL ME project. Before getting into the details of the online course, Roberta provided some context about the difficulties and limitations that healthcare professionals had to face during the 2009 (H1N1) influenza pandemic, in their communications with patients and the general public. It was emphasised the fact that healthcare professionals are typically in the middle of a storm in the case of an infectious disease outbreak, since they form part of the public sphere and constitute one of the at-risk groups from the one hand, while they are also recognised as an important stakeholder group, in accordance with the TELL ME framework model for outbreak communication. Roberta stressed the importance to recognise also the fact that healthcare professionals are among those stakeholders who are direct recipients of misinformation and rumours that spread within the community, so they need to be well-equipped with knowledge and accurate information in order to counter these rumours. This is particularly significant as studies have shown that healthcare professionals are thought to be a trusted source for information, however it has also been noted the lack of professional skills in counselling and communication that the online course seeks to enhance.

Next, the *online course for primary care staff* was presented as a practical tool which at first level aims to help healthcare professionals to get better acquainted with issues related to seasonal flu, vaccination and associated risk, and further advance their skills in counselling and communication on issues that emerge in the course of an epidemic or pandemic. Roberta provided detailed information on the content of the online course and explained the various type of sources that have been consulted for the set up and development of the different dossiers, which include: 1) *Epidemics and Pandemics: General Guidelines*, 2) *Talking about Prevention*, 3) *Stigmatisation and Discrimination*.

As explained, the course can be completed in several sessions, while the reading of related and specified sources is mandatory to respond to the questions in any of the six case histories presented. Roberta mentioned that the most recent online course on Ebola was reviewed by the Istituto Spallanzani and the ECDC, while it received accreditation by the Italian Federation of Doctors and Nurses' Associations

(FNOMCeO). The audience was informed that upon successful completion of the prototype online course, a certificate is awarded to participants. In the conclusion of her speech, Roberta revealed that another online had been prepared by Zadig in response to the Ebola epidemic, including the following three case histories: a) *Threats in flying?*, b) *Fears and prejudice*, c) *Coming back home*.

Dr. Jennifer Badham
Centre for Research in Social Simulation – University of Surrey
Title of presentation: *"A prototype simulation model for communication during major influenza epidemics."*

This presentation aimed at introducing yet another end-product of the TELL ME project, a *prototype social simulation model for communication*. In the opening minutes of her presentation, Jennifer explained the unique features and innovative aspects of the simulation model. More specifically, the question asked was

"Why the need for another simulation model?" and the answer is in *communication,* which is another element that interacts and can be inter-connected with the elements of *personal behaviour* and *epidemic spread*. It was further indicated that this prototype model serves for planning communication in advance to minimise the epidemic impact.

Jennifer continued her presentation to provide an overview on the design process followed for the development of the simulation model, which involved drawing information from the scientific literature, TELL ME research outcomes and resources, discussion groups and workshops. The main interface of the prototype was presented, with descriptions on the various components which either represent inputs to the model (i.e. communication effects, behaviour adoption, epidemic features) or outputs in the form of graphic representations (i.e. communication effects, epidemic progress). An important point about the simulation model was that two models exist within that interact with each other: the mathematical (epidemic) model and the agent-based (people) model.

Next, the *broad model logic* was presented to the EAB members, providing explanation on the various health behaviour determinants and other factors that influence the decision-making process for an individual to adopt protective measures. Moreover, Jennifer made reference to a hybrid model used for the development of the simulation model, where different elements are employed from psychological theories on behaviour (i.e. Theory of Planned Behaviour, Health Belief Model, Protection Motivation Theory). In addition, some context was provided on the different properties of a message (Timing/Trigger – Media Channel – Target Group – Behaviour – Message Content) which forms part of communication plans after an infectious disease outbreak has been reported. Specific mention was made on the "content" property of messages, with an indication of the different behavioural responses and attitudes that can emerge in response to the content of a message.

A demonstration of the simulation model followed, based on a pre-defined scenario developed for the purposes of this TELL ME activity, where certain variables had been considered such as the epidemic features, behavioural responses, and communication strategy selected by decision-makers in the process. Jennifer highlighted that for the purposes of scenario-testing there was a progressive addition of elements in order to clearly observe the effect of each element for the communication process, and calibrate

accordingly the response. Furthermore, it was underlined once more that the simulation model is not a predictive model but rather a prototype model to link three inherently connected components of the system of an influenza epidemic, with the aim to assist planners to assess the role of effective communication in epidemic management.

Question 1: *Is it difficult to calibrate the model for another infectious disease outbreak instead of influenza, like Ebola for instance? (Luca Carra, Zadig Srl)*

It would be possible to calibrate for another airborne disease, but would be impossible to calibrate for Ebola. The reason is that any fundamental assumptions made for people's behaviour in the case of an influenza epidemic, would greatly differ in the case of Ebola or any other disease that have a different mode of transmission.

Question 2: *Wouldn't it be valuable to use this kind of modelling to look backwards, epidemics from the past, to understand them better, in order to achieve more accurate predictions in the future? (Paul Quinn, Vrije Universiteit Brussel)*

To some extent, this is what we do when we calibrate. It's just that H1N1 was the only pandemic that there's been any real data collected to allow us to do that. For the other epidemics in the past, you can probably can get good information on most of them about the number of cases, but there's no real information about what sorts of behaviour people followed, or what their attitude might have been.

3.2.3 Session 3 | Perspectives from EU projects on outbreak communication and the healthcare context

This purpose of this session was to present perspectives from other EU projects in the field of risk communication and public health (i.e. ECOM, ASSET, PHEME), with the aim to extend collaboration and create a community of experts in the area of infectious disease outbreaks. This session was chaired by ***Ms. Mitali Wroczynski*** *(British Medical Journal Publication Group).*

Prof. Jeff French
Strategic Social Marketing Ltd.
Title of presentation: "*Beyond information transmission to behavioural influence: An update from the EU WP7 Project ECOM."*

The opening speech was given by a representative partner from the "sister project" of TELL ME, entitled *ECOM (Effective Communication in Outbreak Management)*. Jeff provided some context around ECOM, explaining that the project brings together social, behavioural, communication management and marketing sciences together to develop an evidence-based behavioural and communication package for health professionals and agencies throughout Europe. An ECOM video was presented to give an overview of the objectives and outcomes of the project, including key suggestions for risk and outbreak communication, followed by a presentation of the seven major conclusions in the project, which are summarised below:

1. Risk perception and recognition of personal risk status can be influenced by "trustworthy" sources of information.
2. Mass media / digital media have a spotlight effect that increases perception of risk but moves on in advance of later advice about appropriate action.
3. There is a need to target communication and behavioural programmes for different groups.
4. A dominant current characteristic of many existing programmes is a focus on rational decision making and the transmission of accurate advice.
5. Disease characteristics, perceptions of efficacy of advice and personal risk perception have a big impact on decision making and compliance.
6. Healthcare workers are key sources of information and public opinion, but are often not optimally used in such roles due to their lack of accurate risk perception and understanding about risks .
7. Under-vaccinated groups (UVG) are often as diverse in their opinions and actions as the rest of the population; however, they do have distinct information, access and support needs.

The presentation then focussed on the work carried out in the context of Work Package 3 (Social marketing analysis of vaccination behaviour, audience segmentation and service delivery), with Jeff putting emphasis on the importance to adopt a social marketing approach in pandemic events in relation to the uptake of protective measures. Jeff introduced the social marketing tools that had been developed and concluded with some points on the complex environment of pandemic preparedness behavioural programmes (e.g. multiple agencies, speed of impact, weak insight and segmentation etc.).

Question 1: *We see the proliferation of mobile technologies and healthcare apps. How do you think we can use and harness these to impact on behaviour changing combat what you call conventional communication? (Mitali Wroczynski, British Medical Journal)*

The majority of these apps run for commercial purposes and are not very well-researched. I think one of the best things we can do is to start point out to people through health literacy programmes how to navigate their way through and assess whether apps are useful or not.

Ms. Valentina Possenti
National Centre for Epidemiology, Surveillance and Health Promotion – Istituto Superiore di Sanità (ISS)
Title of presentation: *"ASSET: A way ahead?"*

This presentation introduced another EU project in the field of infectious disease outbreaks and pandemic management, entitled *ASSET (Action plan on Science in Society related issues in Epidemics and Total pandemics)*, which is considered as the project to provide the operational framework for the exploitation and implementation of the TELL ME research findings and end-products. Valentina opened her speech by introducing to the audience some information about the identity of ASSET, and discussed the fundamental concepts that drive the project. More specifically, it was mentioned that as an MMLAP Programme, the ASSET project has a strong focus on *connection*, *communication* and *democratisation* and further explained that ASSET will seek to integrate the newly introduced H2020 SWAFS concept, i.e. Science With and For Society. The aims of the ASSET project were summarised as follows:

1. Forge a partnership with complementary perspective, knowledge and experiences to aaddress effectively scientific and societal challenges raised by pandemics and associated crisis management.
2. Explore and map SiS-related issues in global pandemics.
3. Define and test a participatory and inclusive strategy to succeed.
4. Identify necessary resources to make sustainable the action after the project implementation.

Valentina explained that ASSET will broaden the TELL ME information and/or communication aspect, and raise it to the wider socio-political level. Since pandemics and other infectious disease crises impact on mortality/morbidity as well as on socio-economic elements, several issues enter ASSET research: governance of flu pandemics; unsolved scientific questions regarding influenza and pandemics; ethical, legal and societal implications of pandemics; gender issues – vulnerability, vaccines; research and innovation; risk of intentionally caused outbreaks. As suggested, ASSET products are supposed to be both practical tools, for enhancing partnership with policy makers and health professionals and for upholding compliance and resilience in the public, and scientific publications. Beside validating the main TELL ME outputs, ASSET could establish international and local infrastructure for communication between stakeholders.

Another important point in relation to the ASSET project was the establishment of the Community of Practice (CoP) platform for communication. Valentina highlighted that through the CoP it was envisaged to make mutual learning operational within the consortium and beyond, as the three inter-related dimensions of the platform (domain, community, practice) provide the appropriate context for generation of new knowledge, expertise and practice. The presentation closed with a remark by Valentina that if the project's payoff (*"Share and move to face nasty bugs"*) is successfully put into practice, then ASSET could really be the way ahead in the field of outbreak communication.

Question 1: *You talked about the consultation and creation of networks as part of the ASSET project. Have you considered the involvement of patients in those networks and the ASSET project in general? (Mitali Wroczynski, British Medical Journal)*

In the context of a specific Work Package on citizen consultation, it is our intention to have also representatives from patient groups. However, we consider a perspective where all representatives' feedback from different groups of society participate and contribute for the development of science.

Dr. Anna Kolliakou
King's College London
Title of presentation: *"Social media platforms and clinical records in PHEME: Trend detection and intervention for mental health."*

Session 3 was concluded with a presentation of *PHEME (Computing veracity across media, languages and social networks)*, a project that aims to track, identify and verify information that spread across social networks and online media, to enable real-time detection of speculation, controversy, misinformation and disinformation. To achieve this, a special computational platform and prototype model will be used for the analysis of content *veracity*, which is one of the greatest challenges of the big data.

An example was provided in the form of a visual representation of how rumours spread on Twitter, and was emphasised the fact that rumours can spread out of proportion within a very short period of time. Anna pointed out that PHEME aims to create a computational framework for automatic detection of rumours in real time, as the next step to present research which assessed the impact and diffusion of

rumours after conclusion of an event. Four case studies were presented briefly by Anna, which focussed on how the online exchange of information can influence decisions and behavioural responses, both from the side of the patient and the practitioners, considering the possibility for diffusion of inaccurate portrayals of a situation in the social media.

From the perspective of an infectious disease outbreak, it was noted that social media deserve special attention from the side public health agencies when there is a need to communicate risk. In particular, Anna suggested that people who access information online out of curiosity may accidentally be influenced in their behaviour, while people who have an interest to collect as much information as possible may come across a number of unreliable sources. Since rumours can easily create a false perception of risk, it is envisioned for a system like PHEME to be developed in the form of communication tool, which could alarm agencies and public health authorities about any controversies that arise in real time and therefore support an early intervention.

Question 1: *I was concerned about this idea of monitoring people's health data on social media. In terms of data protection it goes a level above, because it involves sensitive data. Would it work on a basis of explicit consent for every user? (Paul Quinn, Vrije Universiteit Brussel)*

The data will be aggregated, and anonymity rests on users depending the kind of information they have decided to share as part of their profile. The collection of data will be based on a randomised selection process.

3.2.4 Session 4 | Emerging plagues in the 21st century: The case of the Ebola epidemic

The TELL ME conference was organised at the peak of the Ebola epidemic in West Africa and the period when the first cases were reported in Europe and the US. Thus, critical communication aspects and other issues relevant to international response to the Ebola epidemic received special attention since practical implications for risk communication and lessons learned could be provided from experts in the field.

The chairman of the session, ***Dr. James J. James*** *(National Disaster and Life Support Foundation)*, made a short introduction on the Ebola epidemic, stating that currently in the US there are two epidemics that unfold: Ebola and the so-called "Fearbola". According to James, the response to Ebola can be described as a failure from a medical and public health perspective, since there is still no vaccine or effective treatment, while we have been witnesses of the poor medical infrastructure that exists in the affected countries. The Ebola epidemic has been a failure also from a communications perspective, since there was no "vaccine" to administer the effects have set in, and prevent the occurrence of "Fearbola" and mass hysteria among the public. With these opening remarks the speakers of the session were invited on stage and were presented to the audience.

Questions and comments from the audience were taken only after conclusion of all speakers' presentations.

Dr. Toby L. Merlin

Centers for Disease Control and Prevention (CDC)

Title of presentation: *"The US domestic response to Ebola: Risk communication and new lessons learned."*

The opening presentation of this session offered an insight from the US experience and response to the Ebola epidemic. As Toby said, "[…] *this presentation is not only about risk communication and new lessons learned, but also about old lessons painfully relearned*". Toby opened his speech by providing some background information on his role as a manager at a CDC Division that is responsible for the domestic US epidemiology and laboratory capacity to support emergency response. Moreover, it was noted that CDC has in fact a structured response for outbreaks, and specifically for the Ebola response, more than 600 people have been involved since the beginning.

The presentation continued with a description of the information and messages that US citizens had been exposed to (through the media) during the Ebola epidemic. Toby stressed that the key message he wished to communicate to the audience was about the extraordinary power of visual images in driving humans' emotions and responses to an outbreak. As noted, the US public viewed in a period of a few weeks a constant demonstration of images of burial removal teams in Africa, which were horrifying images. Toby provided an example of an incident that constituted a communication failure; this was the case of the first US patient who was evacuated from Africa, and images showed members from the medical staff wearing a respirator apparatus, which image was in direct contrast with CDC claim that the Ebola virus disease is not transmissible through air. A similar case was described by Toby, where news media showed images of decontamination of apartments and people who had been in contact with Ebola-infected patients. Again, this produced a conflicting message for the public since in the CDC website is specified that there is no scientific evidence available that items from the physical environment pose a significant risk to acquire the Ebola virus disease. Toby concluded that there's an enormous gap between our science-based communication and what is established in people's mind from what they have seen.

Next, a number of lessons learned were presented from the US experience of Ebola in Dallas (TX), which are summarised below:

- Public fear of lethal contagion is powerful
  - Deeply emotional
  - Disproportionate to actual relative risk
  - Very difficult to mitigate through rational argument
- 24-hour media strongly influences (determines?) public perceptions
- Visual images strongly influence (determine?) public perceptions
- Media usually choose most powerful visual images
- Media/visual images can drive public health response
- Evidenced-based public health messages are necessary, but not sufficient to mitigate public fears
- Need powerful images –as well as messages – to mitigate fears

Finally, Toby emphasised that we can achieve powerful and effective public health communication when images are also used appropriately. The example of nurse Nina Pham was presented in that case, with press events being held at her discharge from the NIH hospital, showing images of the NIAID Director Anthony Fauci and US President Barack Obama, both embracing the nurse as a way to communicate this person is no longer infectious.

Dr. Brian McCloskey
Public Health England
Title of presentation: *"Ebola home and away: Risk communication challenges."*

The second presentation of Session 2 focussed on the UK experience and response to the Ebola epidemic. Brian set the scene for his speech by saying that his presentation would connect the three main themes that reflect the objectives of this session: a) the reality of Ebola, b) the media presentation, c) the communication challenges. As explained by Brian, a brief overview and update on the situation would be provided, with particular emphasis on the difficulty of producing health messages for the public in different contexts.

According to Brian, there is a mixed picture of progress of the Ebola epidemic. the UN is cautiously optimistic about the future as there is a belief that the epidemic could be controlled and the virus be beaten, however there is some caution as the strategy implemented hasn't worked completely. At this point, Brian made a remark about the need for targets in order to proceed and deliver the work. In the case of the Ebola epidemic response, it is difficult to present to the media and the public which of the targets have been achieved since these are not easily quantifiable and so progress is not measurable. However, it was stressed that remains an important challenge to be realistic and open at the same time, of what can and cannot be done in an emergency situation.

Next, Brian provided a snapshot from the situation in West Africa and the involvement of Public Health England since August 2014. The main focus of the Ebola response has been the isolation and treatment of cases. The increasing number of treatment centres being set up and availability of hospital beds in some parts of West Africa contributed significantly in the decrease of number of reported Ebola cases in Liberia and Sierra Leone. This would be the time to make the shift to the traditional approach of identifying those infected and tracking people who had been in contact with the infected person, so all could be taken care of and prevent from coming in contact with anyone else.

Behavioural change was identified as one of the greatest challenges in West Africa, and more specifically in relation to safe burials, a widespread tradition in the region which involves a lot of contact with the deceased person and participation of entire communities, so a burial could easily generate a number of cases. Brian explained that the cultural context is really crucial in communication, as this practice is deeply rooted for people in Africa with the belief that at the moment of death the spirit leaves the body, but if that spirit is properly looked after the moment of death it stays to support the community afterwards. This ritual cannot be challenged by anyone external from the Western world, and need to find alternatives for communication.

Another communication challenge presented was relevant to conspiracy theories that flourish in the area, with cases of people who deny the existence of Ebola, to others who believe the virus was created in laboratories as a weapon of mass destruction, or as a method for population control.

Following the description of the situation in West Africa, Brian concluded with the UK reality and the need to recognise that politicians and public health people can have different priorities or be divided over an issue, and so we end up with mixed messages produced. Professionals assume that all government decisions are based on evidence, however there is a political dimension which requires careful consideration, since there are cases where government is thought to be doing too much or too little, depending on the context.

Dr. Nigel Dowdall
Aviation Health Unit - Civil Aviation Authority
Title of presentation: *"Ebola: Global aviation and public health working together?"*

The final presentation of this session on Ebola offered another perspective and provided a wider context for discussions, as a very important stakeholder group was represented, such as the commercial aviation industry. In his presentation, Nigel presented some numbers which were indicative of the huge number of people who travel to any destination worldwide, within a matter of hours. The public health issue in this case is that international air travel is an effective and efficient way of rapidly spread contagious diseases across the globe, while only a few measures, if any, have been shown to be effective in preventing such spread. However, as it was argued by Nigel, even in long-distance flights it would be difficult to detect and control the spread of a disease, since early symptoms (e.g. high temperature) could be associated with a number of other infectious diseases.

A question posed by Nigel concerned the reasons behind people's choice to travel even when they feel sick. Some of the reasons provided include that people want to get back home or because they believe this is only a mild illness. The bottom-line is that people find always a personal justification for travelling when sick, which becomes a major issue for the aviation industry as a number of additional precautionary measures are implemented by governments, such as travel restrictions and airport screening. To provide some additional context on this issue, the roles of the Ministries of Transport and Aviation Authorities in the UK were discussed, to emphasise the fact that "safety" is a concept that relates more to the transport infrastructure rather than issues of public health.

Some lessons learned and the impact of different outbreaks for the aviation industry were presented next by Nigel. Specific to SARS back in 2003, it was highlighted the inconsistent approach followed by different airlines and the role of media and "experts" in raising public fear, which had a major impact regarding the financial costs. According to Nigel, the case of the 2009 H1N1 pandemic proved to be different, as the good cooperation between WHO, ICAO and IATA contributed in avoiding any major disruption for air travel at that time.

In the case of the Ebola epidemic, it was highlighted the fact that much progress has been made since the 2009 H1N1 pandemic considering the presence of an ICAO medical adviser in the IHR Emergency

Committee or the production of guidance documents by WHO on travel and screening at points of entry. Nonetheless, some problems and challenges still remain, such as the impact on direct flights to affected areas due to airline carriers' concerns or state restrictions. At the level of communications and liaison with UK public health authorities, it was indicated the initial frustration with the lack of documented policies and procedures for coordination, however the close collaboration with the Department helped to overcome any issues and succeeded in the standardisation of procedures to manage a suspect case either on board or in the airport.

Nigel express his concern about the presence of mixed messages and their impact on both aviation staff and the general public or passengers. The importance of consistency of messages was demonstrated in the SARS epidemic, while the importance of following guidance of trusted bodies (e.g. WHO, ECDC) was demonstrated during the H1N1 pandemic. Another point made was the challenge for medical experts working in government advisory roles, where they may find themselves in a position where there is a need to support, explain or challenge an action they may not necessarily agree with. A few conclusive points were presented at the end, which are summarised below:

- Global aviation and public health authorities can indeed work together both nationally and internationally.
- How can we do better next time?
    - Make sure that the networks and working groups we have built in responding to Ebola are followed up, to become cross-departmental and cross-organisational policies and procedures.
    - Work with experts in risk communication to ensure that our message is heard / listened to at all levels of both government and media.
    - Find effective ways to challenge actions / decisions that threaten the consistent message.

Follow-up discussion

Question 1: *When Ebola is no longer headline news by the mainstream media, do you think there is a risk that pledges for money and resources to support Africa will disappear? This, as part of the discussion that media can affect responses at all levels. (Karl Ekdahl, European Centre for Disease Prevention and Control)*

BM: There is such a risk, especially since what we need to do in the next months will be less visible, so we need to find the right mechanisms to maintain the international interest and to ensure that money continues coming in.

TM: In the US, there has been a proposition by the President to make available a total of 6.2 billion dollar as emergency Ebola fund, and this proposition is under review by the Congress. Almost half of this budget will be invested in support of the international response to Africa.

Question 2: *In your presentation, a strong appeal was made for use of powerful images to communicate messages. I would like to hear some guidance about how could we better respond to this appeal for suitable images? (Cham E. Dallas, University of Giorgia)*

TM: I agree with you. I think people outside of communications don't realise just how hungry the media is for images to fill time, and that's why the images I showed were presented over and over again. I think filling them [the media] with timely images is a major challenge to overcome, and should be careful as you end up giving them stock.

Question 3: *Let's imagine a scenario where a person is travelling back home after having visited one of the infected countries in West Africa. At some point, this person complains to the air-stewardess about feeling unwell and also seems to have some fever. What kind of instructions must the crew follow in such a case? Would it be required to share or hide from other passengers this suspect case? (Manfred Green, University of Haifa)*

ND: There are actually internationally agreed procedures by WHO and IATA, on how crew should manage a suspect case on-board. Air-stewards receive training on the type of procedures that are followed to handle a suspect case, which involves notifying the flight crew, and then on to the air-traffic service to provide support. All information about the suspect case should be transmitted to the destination airport, where the local health authorities will be mobilised and take care of the suspect case. Most international airlines will have access to medical advisory services in order to obtain health professional input. From a communications perspective, the main priority is to clarify the level of risk. It is not recommended to alarm people while on board, as there could be a false alarm with unknown consequences.

Question 4: *Do you think the CDC communication failed in the US, since there was an elevated perception of fear among the public? (Anne Gulland, British Medical Journal)*

TM: No, I don't think it was a communication failure. The CDC made extensive efforts on risk communication and management, but there have been these "black swan" events for which we had not planned for. For instance, we did not plan for an issue to be made about regulatory constraints in cleaning up an apartment that a patient had occupied – you can't plan for everything, in every major event there will be black swans. You need to be prepared to respond. I think that if the overall expectation in an international disease outbreak is that nothing bad will happen with a zero-risk effect, then you are setting public health up for something impossible to achieve.

3.2.5 Session 5 | Risk communication to prevent and protect against infectious disease outbreaks

The chairman of the session, ***Dr. Donato Greco*** *(Zadig Srl)*, made a few introductory remarks to underline the fact that issues around *risk communication* have moved up on the policy agenda at both national and international level. It was noted by Donato that under the Italian presidency of the EU, a meeting was called to approve the publication of an EU document on vaccination which includes a list of 27 point on communication. On a separate note, Donato refused to consider this conference to be the *final* event of the TELL ME project, as the project is destined to continue with the various tools that have been developed.

Dr. Pier Luigi Lopalco
European Centre for Disease Prevention and Control (ECDC)
Title of presentation: *"How bad communication can destroy a well-planned vaccination programme"*

Pier Luigi opened his speech with a remark about the title of his presentation, where he highlighted the contradiction between the words "bad communication" and "good planning" that exist in the same sentence. According to Pier Luigi, it is the quality of communication that determines the success of a well-planned vaccination campaign. Such was the case of the HPV campaign, which started off as a success story as it was implemented quickly by the majority of European countries. However, after a short period of time there were reports on the news about cases of sudden death after vaccination. This has been a communication failure since the public never received information on this possibility, and in the addition of rumours that started to circulate about the HPV vaccine, caused the vaccination campaign to stop at national level.

The first point made by Pier Luigi was that *good communication needs good evidence*. In the absence of evidence, communications cannot be carried out properly. In the specific case of vaccination campaigns, it is also important to plan carefully and communicate any adverse events before the vaccines are administered. Another case presented was the withdrawal of two batches of the FLUAD vaccine in Italy, due to reported adverse events. The observation made by Pier Luigi was that newspapers made a balanced approach to the issue, however the titles that appeared on the article and front page of newspapers were quite alarming and scary. In the next slide, it was presented the way that information had been picked up and misinterpreted by the media of another EU country, with negative effects on the flu vaccination rates in the days that followed.

Another point made was that communications are ineffective in the case where there is a clash of opinions between different authorities. This can raise suspicion and negatively affect behavioural responses of the general public, or even generate rumours and conspiracy theories. The last example provided by Pier Luigi concerned a correction made by the WHO in the definition of influenza pandemic, in the aftermath of the 2009 (H1N1) pandemic. With this correction, WHO intended to provide a more accurate definition for influenza pandemic by removing the part related to severity. This change triggered reactions from the anti-vaccine groups and provided new grounds for conspiracy theories to grow.

As a conclusion to his speech, Pier Luigi suggested that in addition to be based on good evidence, communication needs to be *timely*, *authoritative* and *unambiguous.*

The members of the panel were invited to take the floor to respond to the presentation and offer their perspectives and ideas around the theme of risk communication and protective measures against infectious disease threats.

Dr. Francesca Russo
Unit for Promotion and Development of Hygiene and Public Health, Veneto Region

Francesca provided insight into the experience and effects of non-compulsory vaccination for the Veneto region. The decision to make vaccination non-compulsory in the entire region, aimed at the investment of more efforts on providing informed decision-making and raise awareness among parents. The audience was informed by Francesca about a recent ad-hoc study carried out to determine the reasons behind parents' refusal to have their children vaccinated. It was reported that parents have a fear for any adverse events of the vaccine and also think that children are too young to receive vaccination. Interestingly, the study revealed that parents are not firmly fixed in their views, which can change with the right evidence.

This intervention was concluded with a point on the importance to provide various types of resources for communication and the need for both health professionals and citizens to receive training on issues related to infectious diseases.

Dr. Alberto Tozzi
Pediatric Hospital Bambino Gesù

In his speech, Alberto stated that he wished to make three points based on what had been discussed already during the conference. The first point made was on the difficulty to identify which evidence and tools are the appropriate ones to use for guiding the communication processes, since the variations in the setting and timing of an outbreak require a different parameters to be taken into account. To this end, Alberto emphasised that in the event of an outbreak it is crucial to keep making efforts to calibrate better the communication process on the basis of epidemiological or other data that is made available, following the example in the field of engineering and laboratory testing.

As a second point, Alberto stated that he has always been impressed by the way commercial firms and companies organise successful campaigns, without the need to implement some scientific approach. Instead, companies are careful to listen and obtain feedback from their audience, and then develop their interventions on the basis of this information received. It was pointed out that the some of the speakers in the conference raised the issue and identified efficient ways to listen. Alberto mentioned an example of medical doctors who do not always have time to listen their patients' concerns and doubts expressed over a medical issue, such as vaccination, and so people turn to online resources to find answers to their questions. From a broader perspective, this trend to search for information online offers the opportunity to a establish a system of "surveillance" through Google analytics for instance, for health professionals to become aware and target communications more efficiently to meet different concerns expressed by the public over a specific issue.

The third point raised by Alberto concerned the systematic exclusion of members from the public sphere in such discussions and events. According to Alberto, in these events the public should be well-represented otherwise it becomes an echo chamber, where the same things are repeated by representative stakeholders. Alberto suggested that we need to recognise the fact that people could contribute significantly to the dialogue on public health issues.

Prof. Itamar Grotto
Israeli Ministry of Health

The last intervention for this session was made by the Director of Public Health Services in Israel, who talked about the polio outbreak that hit Israel in 2013. First, Itamar provided some context around the polio outbreak and how it was decided to put forward a nationwide campaign to introduce the OPV vaccination once again in an effort to control the outbreak. It was noted that from the onset of the outbreak, the public health authorities had to face a number of communication challenges in relation to vaccination.

More specifically, one of the major risk communication challenges had been the "silent" nature of the virus; for most people the virus existed only on the news as they had no direct experience of anyone getting

infected by the virus, so people wondered why the need for vaccination. The second communication challenge was about finding a way to re-introduce the OPV on the vaccination schedule for children, since this vaccine had been removed almost 10 years ago and was labelled by many as dangerous. Another important challenge noted by Itamar was relevant to communicating to parents that the OPV vaccines were not intended to protect the children who would receive it – as they were covered already by the IPV vaccine – but the family members instead.

Next, Itamar analysed the type of initiatives and actions taken by the Ministry of Health in order to handle efficiently these communication challenges, and prevent the emergence and circulation of misinformation and conspiracy theories from the side of anti-vaccine groups. The first action for the Ministry of Health was to assemble representatives from various medical communities, to explain the situation and on which basis certain decisions were made, with ultimate goal to reach consensus on the need to implement the proposed vaccination plan. This had been an important step, as the anti-vaccine groups had difficulty in finding a reputable expert to give an opposite view. The second action was to ensure transparency also towards the media, so they received regular updates and reported on the basis of information presented by the Ministry. Also, much attention was given by Ministry to build presence in the social media so that they could respond to the questions, concerns and any other issues raised by the public. Finally, the engagement of volunteers in the communication process played a key role in the successful implementation of the vaccination programme, whose focus had been to engage into discussions with anti-vaccine bloggers and provide evidence provided by the Ministry to offer arguments against the anti-vaccinist positions.

The final session of the TELL ME conference was concluded with this presentation. Donato thanked all speakers for sharing their experiences from the field and for their valuable contributions in the discourse around vaccines and risk communication. Next, the TELL ME Scientific Coordinator was invited to take the floor and deliver the closing speech of the conference.

4. Conclusive remarks by the TELL ME Scientific Coordinator

This section presents the closing speech and final remarks made by the TELL ME Conference Chair, ***Prof. Manfred Green***.

“I would like to first thank all the speakers for their presentations and chairpersons for managing the different sessions. I think this conference was very stimulating for everyone in the room. I would like to go back to what I said at the start of this meeting, about the question of how could theory be translated into practice.

As Alberto said in his presentation, I think we may end up talking to ourselves and not really getting a message out. I think we really need to define for ourselves what exactly is the objective of effective communication. Do we need good communication to make the public feel that recommendations are reasonable or to ensure that public will adhere to recommendations?

When we talk about infectious diseases, we talk about something that is particularly frightening for people. A virus is something that moves from one to the other without you seeing it, you are very suspicious of how is transmitted, you are very suspicious of recommendations to prevent it, and frequently you are suspicious about recommendations for treatment because frequently treatment is not very effective.

We live in this world of infectious diseases, and we start off at a disadvantage since there is the element of mistrust toward the health establishment that we need to overcome, and when it comes down to the delivery of messages the components of trust and transparency are very important. If there is no transparency, then there is no trust. And then we are led to this question of how can we have transparency when we are dealing with uncertainty. How do we actually convey uncertainty, especially when uncertainty is something that we all have difficulty understanding? The real challenge is our difficulty to understand what is *risk*; it is a word that we use freely, but is a complex concept to understand. So when we talk of the population not understanding risk, we have to recognise that we are not entirely comfortable with the term ourselves.

Ultimately, people try to reduce risk into something that is easier to live with. Even if we say that there is no risk, we know at the back of our mind that some risk still exists. In the case of vaccines, when a person comes up and asks "*Is this vaccine associated with risk?"* a general response is usually given that there is a small risk. But what is a small risk? For some reason, the 1/1,000,000 probability seems to be a very small risk. Why? There's no logic behind this, but one in a million sounds very low. The perception of risk is contextual and not necessarily objective.

The risk communication issue covers particularly complex subjects for all of us, and what we have been trying to do is to put risk communication into a framework that we can use in practice, to make sure that the public acts rationally under circumstances where irrational acts would actually be damaging. For instance, if someone who is not ready to be vaccinated or vaccinate their child, they may then be causing damage to others.

This is why I think that what we should be doing next in this project is to shape and apply these concepts we have developed by means of incorporating these concepts into case studies. As we move forward with the ASSET project, and hopefully other projects as well, I would us to use some case studies to challenge the practical application of our concepts in different kind of situations. We need to be put in the situation where we need to make the decision.

I also like the idea of trying to involve people from the public, which is again a very complex process. How do we get people from the public to join us? There's many patient groups organisations around Europe, which run campaigns for the protection of patients' rights. We could also be representatives from this group, as we all are ordinary people. But I think we do need to bring ordinary people into our discussions and let them give their input.

We need to make an effort to bring theory into practice, but can be done in collaboration with the other projects presented today in the conference.

I would like to thank all of you, it was really wonderful, I enjoyed it and I hope you enjoyed it, and I hope that we meet again soon. Thank you!".

5. Post-conference impact

The TELL ME conference was digitally covered by BMJ representatives, whose frequent tweets on the Twitter platform allowed individuals to link with the conference and discussions carried out in real time. A separate report was produced which reveals the impact and reach of the TELL ME conference to a large audience of stakeholders (see **Annex III**).

Moreover, the TELL ME project was further promoted as the TELL ME conference received particular mention by columnists from the BMJ group and another EU-funded project on pandemics communication, ASSET (see below).

Ms. Anne Gulland

"Quarantining health workers returning from Ebola affected countries is "bad science" , says public health adviser." (08 December 2014)

Direct Link: http://www.bmj.com/content/349/bmj.g7559

The ASSET project

"TELL ME Conference: Between theory and practice." (22 December 2014)

Direct Link: http://www.asset-scienceinsociety.eu/news/tell-me-conference-between-theory-and-practice

Ms. Claire Bower

"Social media during epidemics: a poisoned chalice?" (05 January 2015)

Direct Link: http://blogs.bmj.com/bmj-journals-development-blog/

ANNEX 1

TELL ME CONFERENCE AGENDA

tellme

Conference Agenda

TELL ME, tell you:
bridging theory and practice for effective
communications during infectious disease crises

4-5 December 2014
Venice, Italy

Co-funded by the
European Union

Contents

The TELL ME project

TELL ME is almost a self-explanatory acronym: **T**ransparent communication in **E**pidemics: **L**earning **L**essons from experience, delivering effective **M**essages, providing **E**vidence. This 3-year project was initiated back in 2012 and is characterised by the innovative, multi-national, and multi-institutional dimension. The main objective for TELL ME is to develop evidence-based models and tools for improved risk communication during major infectious disease outbreaks, epidemics or pandemics.

After the mixed results of public health campaigns aimed at preventing the spread of influenza during the 2009 A(H1N1) pandemic (including the controversies raised by vaccination and anti-viral drug campaigns), it became apparent the need to revise the current wisdom about human behaviour in pandemics, communication policies, and the involvement of health professionals in the process. The TELL ME project sought to develop a new framework model for communication, a set of strategies and recommendations encapsulated in an integrated practical guide for outbreak communication, an online course for heath workers and an innovative social simulation software for decision makers, specifically designed by the TELL ME project to allow public health officials and agencies to plan communication policies and strategies for future infectious disease outbreaks.

The TELL ME consortium comprises a multi-disciplinary team of professionals from twelve institutions (Universities, National Institutes of Health, Media and Communication Companies, Research Centers, Professional Organizations, Civil Society Organizations) and eight different countries (Belgium, France, Hungary, Israel, Italy, Latvia, United Kingdom, United States).

The main objectives of TELL ME since the beginning of the project:

- **Collect and assess evidence about population behavioural responses** to infectious disease outbreaks, and ways in which different types of communication can affect human behaviour.
- **Identify and report emerging challenges**, new methods and tactics in communication concerning infectious disease outbreaks.
- **Develop a new framework model** for outbreak communication.
- **Develop an online course** for primary care staff.
- **Develop an integrated communication package** including a series of guidance documents for different actors and a practical guide for outbreak communication.
- **Develop a simulation model prototype** for simulating the actions and interactions of autonomous decision-making entities in the course of an influenza epidemic.

About the conference

TELL ME about the goal of this conference

During this conference, we will present advances in the approach to risk communication and major infectious disease outbreaks. We will present new communication tools and strategies to better involve the public and healthcare providers in the communication process, to ensure that messages reach their target during all phases of the epidemic or pandemic.

TELL ME about the project objectives

TELL ME is an EU-funded project funded, headed by a consortium of a multi-disciplinary team of experts from prestigious institutions in eight countries. The TELL ME project has a strong focus on risk and outbreak communications and population behavioural responses to messages produced by health authorities in the course of a major infectious disease outbreak. An important goal of the project has been to address the challenge of low adherence to non-pharmacological protective measures by people and increasing refusal to vaccination among different segments of the population, a growing trend which could become a major challenge in future epidemics and pandemics.

TELL ME about the project's innovative aspects

TELL ME has proposed a new participative model for risk communication, which would help public health authorities to secure optimal preparedness for infectious disease threats. This will be achieved by increasing the resilience of all communities during epidemics and pandemics. As part of the products of the TELL ME project, we created a series of guidance documents for professionals in the field of public health and a practical guide for outbreak communication, developed an agent-based simulation model for public health officials and decision makers, and prepared an e-learning course for primary healthcare workers.

TELL ME about who should be attending this conference

The target audience for this conference are health policy makers, communications officials and representatives from public health authorities that operate at a international, European, national and local level, healthcare providers, civil servants, the pharmaceutical industry, NGOs and the media.

TELL ME about what is expected from this conference

We expect to present useful communication tools and products that will have an impact in the field of public health and the society at large. Secondly, we will demonstrate how these tools have practical value and potential for use by professionals in the field. Thirdly, we genuinely wish to create a community where knowledge from similar initiatives can be shared and unique viewpoints can be expressed, with the aim of refining our defenses against the continuing threats posed by infectious diseases at regional and international level. Last but not least, we aim to provide messages that will help inform people about the critical aspects of communication for both pharmacological and non-pharmacological interventions during infectious disease threats.

Dates and meeting venues

WELCOME EVENT
Thursday 4th December 2014

Don Orione Artigianelli
Dorsoduro 909/a,
30123 Venezia

T: +39 041 5224077

More information at
www.donorione-venezia.it

CONFERENCE
Friday 5th December 2014

Palazzo Cavalli-Franchetti
S. Marco 2842,
30124 Venezia

T: +39 041 2407755

More information at
http://www.palazzofranchetti.it

Registration and contacts

Registration

There is no registration fee for attending the TELL ME conference.

Early registration is strongly recommended, as a limited number of participants can be accommodated for this conference.

If you wish to attend the conference, please register online at:

http://www.tellmeproject.eu/node/330

Alternatively, you can send a short bio note and a letter of motivation to the conference chair, Prof. Manfred Green.

Contacts

Conference Chair:
Manfred Green
manfred.s.green@gmail.com

Scientific Secretariat:
Dimitris Dimitriou
dimitriou@zadig.it

Organising Secretariat:
Angelo Todone
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Giorgia von Berger
vonberger@zadig.it

Host Institution:
Zadig S.r.l.
Via Ampère 59 – 20131 – Milano, IT
T: (+39) 02 7526131
www.zadig.it

Conference programme
- Don Orione Artigianelli

WELCOME EVENT
Thursday 4th December 2014

18:00-19:00	Registration
19:00-20:00	Welcome address & Keynote speech
19:00-19:15	**Manfred Green -** School of Public Health, University of Haifa Welcome speech by the Chair and Scientific Coordinator of the TELL ME project.
19:15-19:30	**Francesca Russo -** Venice Prevention Directorate, Region of Veneto Welcome speech by the Head of Unit for Promotion and Development of Hygiene and Public Health.
19:30-20:00	**Karl Ekdahl -** European Centre for Disease Prevention and Control (ECDC) Risk communication aspects of the more recent Ebola outbreak.
20:15-22:30	Dinner and networking at the "San Trovaso" restaurant (By invitation only)

Conference programme
- Palazzo Cavalli-Franchetti

CONFERENCE
Friday 5th December 2014

08:00-08:45	Registration
08:45-10:45	**SESSION 1** : Theoretical concepts and critical aspects in public health crises Chair: **Francesco Zambon -** World Health Organization / Regional Office for Europe
08:45-09:15	**Bernardino Fantini -** Geneva Medical School Figures of fear and empathy: Perception of epidemics and representation of the behavioural responses to them in literature, art and music.
09:15-09:45	**Kåre Harald Drager -** The International Emergency Management Society (TIEMS) The role of risk communication and education and training in building resilient communities.
09:45-10:15	**Simon Langdon -** CEDARthree Are risk and trust related in a public health emergency? Who will you trust?
10:15-10:45	**Paul Quinn -** Vrije Universiteit Brussel Stigmatisation and discrimination: The inevitable social companions of public health crises.
10:45-11:00	Coffee break
11:00-13:00	**SESSION 2** : The TELL ME approach to risk and outbreak communication Chair: **Luca Carra -** Zadig Srl.
11:00-11:20	**Anat Gesser-Edelsburg -** School of Public Health, University of Haifa A new framework model for outbreak communication.
11:20-11:40	**Dimitris Dimitriou -** Zadig Srl. A practical guide for risk and outbreak communication.
11:40-12:00	**Alexander Talbot -** Representing the British Medical Journal Publishing Group (BMJ) The role of social media in risk communication for healthcare professionals.

12:00-12:30	**Roberta Villa -** Zadig Srl. Online course for healthcare professionals for communications in epidemics.
12:30-13:00	**Jennifer Badham -** University of Surrey A prototype simulation model for communication during major influenza epidemics.
13:00-14:00	**Lunch break**
14:00-14:45	**SESSION 3** : Perspectives from EU projects on outbreak communication and the healthcare context. Chair: **Mitali Wroczynski -** British Medical Journal Publishing Group (BMJ)
14:00-14:15	**Jeff French -** Strategic Social Marketing Beyond information transmission to behavioural influence: An update from the EU WP7 Project ECOM.
14:15-14:30	**Valentina Possenti -** Istituto Superiore di Sanità ASSET: A way ahead?
14:30-14:45	**Anna Kolliakou -** King's College London Social media platforms and clinical records in PHEME: Trend detection and intervention for mental health.
14:45-16:00	**SESSION 4** : Emerging plagues in the 21st century: The case of the Ebola epidemic Chair: **James J. James -** National Disaster Life Support Foundation
14:45-15:00	**Toby Merlin -** Centers for Disease Control and Prevention (CDC) The US domestic response to Ebola: Risk communication and new lessons learned.
15:00-15:15	**Brian McCloskey -** Public Health England Ebola home and away: Risk communication challenges.
15:15-15:30	**Nigel Dowdall -** UK Civil Aviation Authority Ebola: Global aviation and public health working together?
15:30-16:00	**Open discussion**
16:00-16:15	**Coffee break**

16:15-17:45	**SESSION 5** : Risk communication to prevent and protect against infectious disease outbreaks. Chair: **Donato Greco -** Zadig Srl.
16:15-16:30	**Pier Luigi Lopalco -** European Centre for Disease Prevention and Control (ECDC) How bad communication can destroy a well-planned vaccination programme.
16:30-17:30	**Panel discussion** Panelists: **Francesca Russo -** Venice Prevention Directorate - Region of Veneto **Alberto Tozzi -** Pediatric Hospital Bambino Gesù **Itamar Grotto -** Israel Ministry of Health
17:30-17:45	**Open discussion**
17:45-18:00	Closing remarks by the Conference Chair.
18:00	**End of Conference**

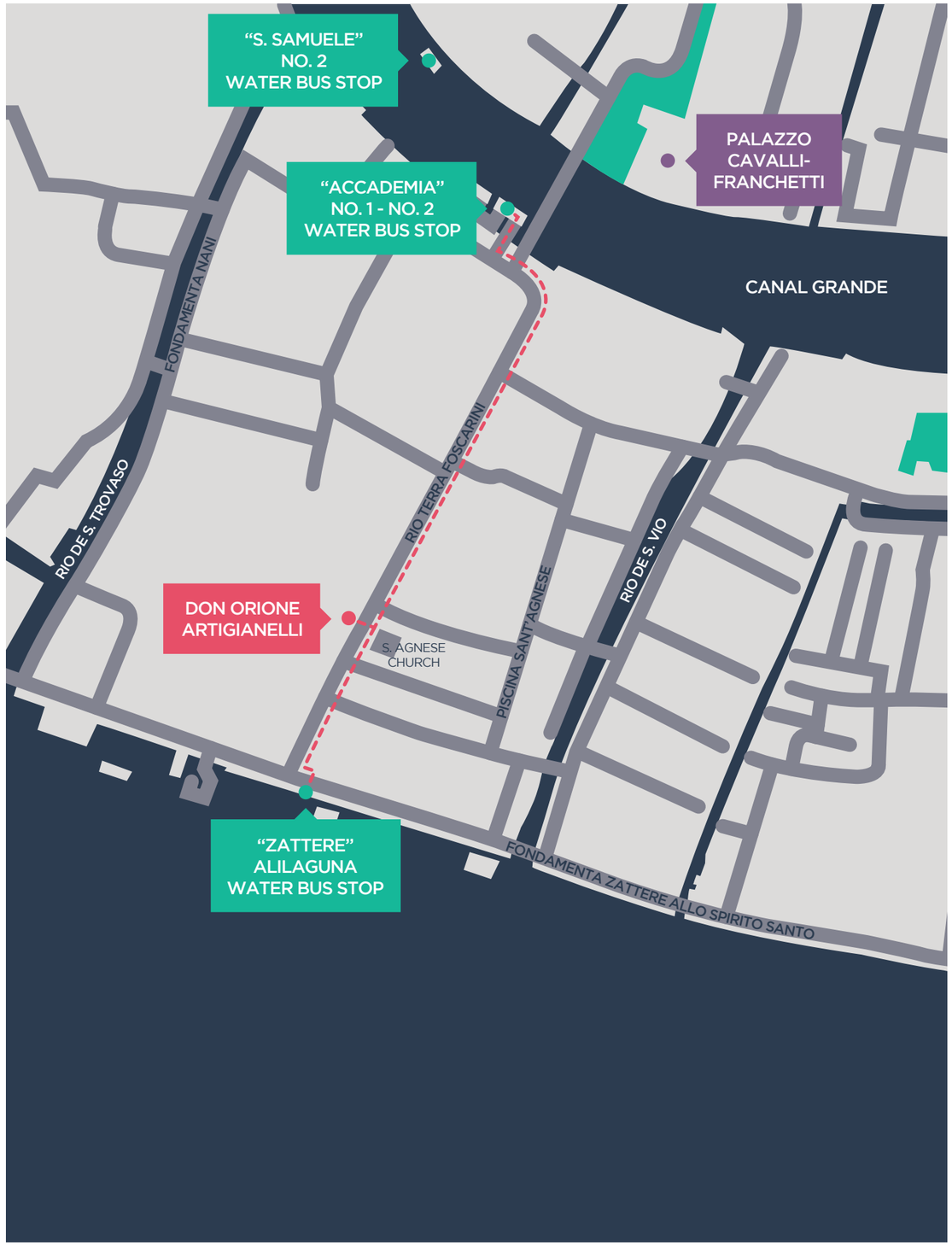
Directions and maps
- Don Orione Artigianelli

From “Santa Lucia” Railway Station

Take the water bus line No. 1 or No. 2 (direction S. Marco) along the Grand Canal and get off at the stop **"Accademia"**. The duration of the journey is about 30 minutes. Upon arrival, keep on the left side and walk along Rio Terà Foscarini. After about 200 meters the entrance will be on the right hand side at No. 909/a in front of the S. Agnese church.

From “Marco Polo” Airport

Take the water bus “ALILAGUNA” (Blue line) and get off at the stop **“Zattere”** and walk along Rio Terà Foscarini for about 150 meters. The entrance is in front of the S. Agnese church. The duration of the journey is about 1h 45’.



Directions and maps
- Palazzo Cavalli-Franchetti

From “Don Orione Artigianelli” Hotel

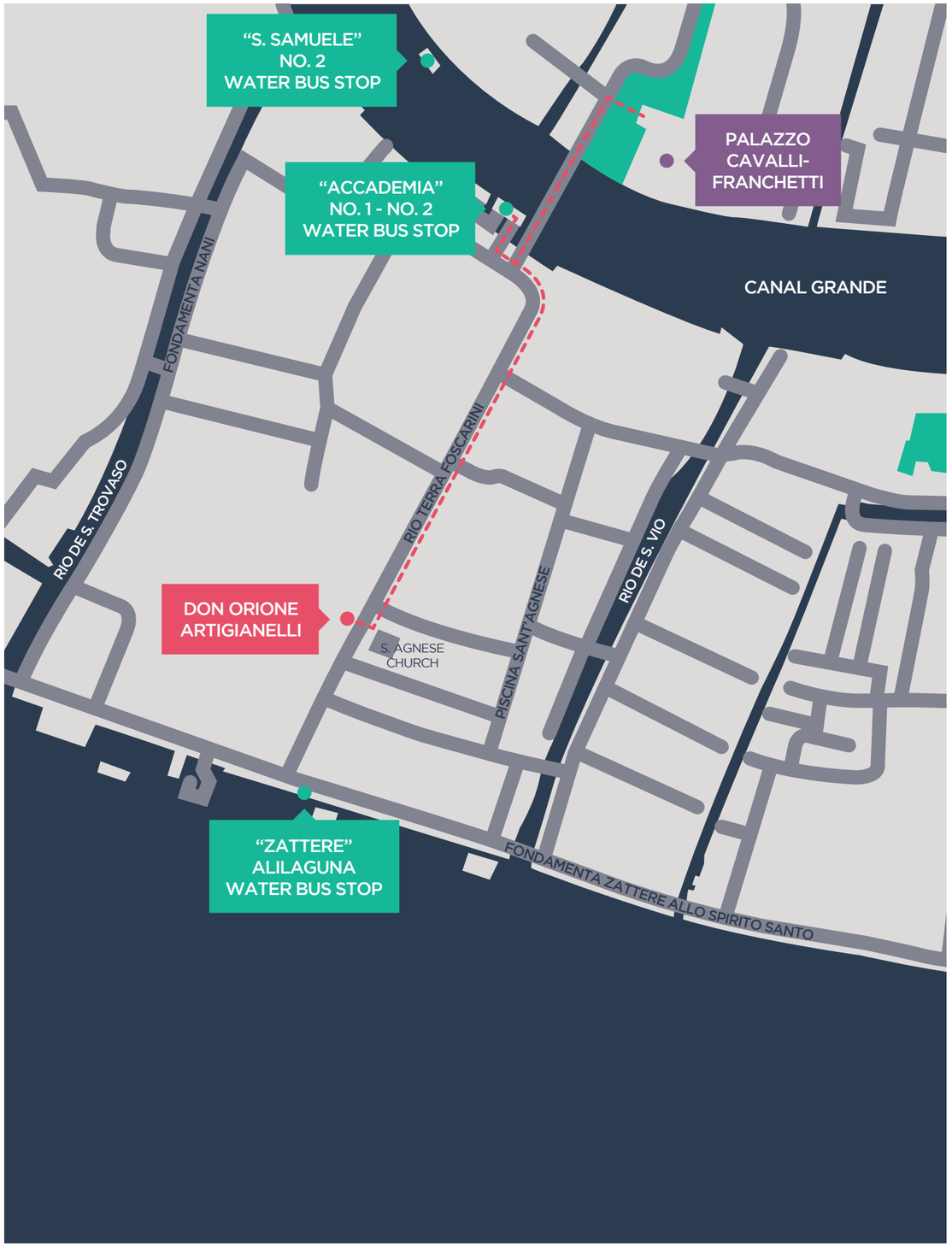
Walk along Rio Terà Foscarini, direction toward the Grand Canal. Cross the Accademia bridge to get the other side of the Grand Canal. The Palazzo Cavalli-Franchetti is situated on the right hand side.

From “Santa Lucia” Railway Station

Take the **water bus line No. 1** or **No. 2** (direction S. Marco) along the Grand Canal and get off at the stop **"Accademia" (bus line No. 1)** or **“S. Samuele” (bus line No. 2)**. The duration of the journey is about 30 minutes.

- From the **“Accademia”** stop, turn left and cross over the Grand Canal using the Accademia bridge, go past the garden of the Palazzo Cavalli-Franchetti and into Campo S. Stefano.

- From the **“S. Samuele”** stop, walk past the Palazzo Grassi, then take Calle delle Carozze. Continue along Salizada S. Samuele, turn left and follow Calle delle Botteghe, which leads to Campo S. Stefano and the garden of the Palazzo Cavalli-Franchetti.



Speaker biographies

Jennifer Badham, PhD
Centre for Research in social simulation – University of Surrey, UK

Dr. Jennifer Badham is a Research Fellow at the Centre for Research in Social Simulation (CRESS), at the University of Surrey. CRESS is developing the TELL ME simulation model to investigate the effect of different communication plans on adoption of protective behaviour and hence the impact of a hypothetical influenza epidemic. Jen originally trained as a mathematician and developed an interest in applying mathematical modelling methods to social policy while working for government and nongovernment health organisations in Australia. Before joining CRESS, she was developing materials about using models for multidisciplinary and participatory policy development with the Integration and Implementation Sciences program at the Australian National University, while completing the studies necessary to convert to social science. Her main research interest concerns the way that social structures affect transmission – of disease, information, beliefs and behaviour. This brings together aspects of social simulation, network science and social psychology.

Dimitris Dimitriou
Zadig Srl., Italy

Mr. Dimitris Dimitriou holds an MSc in Health Psychology (City University of London) and a MSc in Environmental Psychology (University of Surrey). After having served as a researcher in various non-governmental organisations in Greece and the UK, he joined the British Standard Institution (BSI) in London in 2006, where he served as a policy analyst and consultant in large-scale projects. In 2010, he joined an association for the social support of youth (ARSIS) in Greece, as a principal investigator in an EU project entitled "Sexual abuse against children in residential institutions", funded within the scope of the DAPHNE III Programme. For three years, he served as a research fellow at the Centre for Science, Society and Citizenship (CSSC) in Rome, where he participated in various FP7 projects as scientific researcher, assistant project coordinator and member of ethical advisory boards. Presently, Dimitris serves as senior researcher at Zadig Srl, and is involved in two public health and communications related projects funded by the European Commission within the scope of FP7. His current research interests include risk and crisis communications under an ethical, societal and psychological perspective, as well as ethical and legal implications in the use of new surveillance technologies.

Kare Harald Drager
The International Emergency Management Society (TIEMS)

Mr. K. Harald Drager is the founding member of the worldwide acting society TIEMS (The International Emergency Management Society - www.tiems.org), which he took the initiative to establish in 1993. He was the International Vice President of TIEMS since its inauguration until 2002, when he took over as TIEMS President, a position he was re-elected to for the 5th time in 2013. He has brought in new ideas and new people in TIEMS and succeeded the organization to span worldwide. TIEMS has under his leadership become the well recognized organization with growing activities in Asia and Europe and now TIEMS activity in Americas, Africa and Oceania is emerging. TIEMS has developed to a global well known

organization with local chapters in many regions/countries, and TIEMS arranges each year workshops and conferences all over the world with focus on disaster risk reduction. TIEMS has also initiated development of a global education, training and certification program and a research coordination service for its members, and recently several Task Force Groups. He has an extensive experience from industry and research activity, especially in emergency and risk management and he acts as the Managing Director of QUASAR Invest AS in Norway, a consultancy in global safety, emergency and disaster management. He has a Master's degree in control engineering from the Norwegian Technical University in 1966 and a Master's degree from Purdue University in USA in industrial engineering in 1973. His specializations are international organizational development, emergency, disaster and risk management and project management. He has done consultancy work for numerous clients internationally amongst others the World Bank/International Finance Corporation, NATO and the European Commission, and he has been project manager of several international research and development projects for methods and software development in risk, emergency and disaster management. He was employed by Det norske Veritas, http://www.dnv.com/ in 1967 and a member of the Board of Directors of the company for 5 years until he left the company in 1983 and founded his own consultancy, AS QUASAR Consultants and later QUASAR Invest AS. He has published numerous papers internationally on emergency, risk and disaster management. He was appointed Professor Chair in 2014 at King Abdulaziz University in Jeddah, Saudi Arabia.

Nigel Dowdall, MSc MBChB MFOM MRCGP Dip Av Med DRCOG
Civil Aviation Authority, UK

Dr. Nigel Dowdall joined the Royal Air Force as a medical cadet in 1979 and during his service completed training in General Practice, Aviation and Occupational Medicine. He retired from the Royal Air Force and joined British Airways (BA) as an occupational physician in 1996 and was appointed Director Health Services in 2004. After leaving BA in 2010, he held part-time appointments as CMO to AXA Assistance UK and as a medical officer at the Civil Aviation Authority (CAA), before being appointed to his present role as Head of the Aviation Health Unit at the CAA in 2011. During his career he has been actively involved in the response to a number of major public health events, including the SARS outbreak, polonium contamination of aircraft, the H1N1 pandemic and the current Ebola outbreak.

Karl Ekdahl, MD, PhD, MSc, DTM&H
European Centre for Disease Prevention and Control (ECDC)

Prof. Karl Ekdahl is head of the Public Health Capacity and Communication Unit at the European Centre for Disease Prevention and Control (ECDC), where he is responsible for the Centre's activities related to preparedness, training and communication. In ECDC, he was the first expert in place at the start-up of the agency in 2005 and he has since then held various senior positions including acting Director. He is a specialist in infectious diseases, and prior to joining ECDC he was Deputy State Epidemiologist for Sweden. In 2007, he was appointed Adjunct Professor in Infectious Disease Epidemiology at the Karolinska Institutet in Stockholm. He is also the former Editor-in-Chief of the scientific journal Eurosurveillance.

Bernardino Fantini, PhD
WHO Collaborating Centre for the Historical Research on Public Health - Geneva Medical School, Switzerland

Prof. Bernardino Fantini is Honorary Professor of History of Medicine and Health, Faculty of Medicine, University of Geneva, and Director of the WHO Collaborating Centre for the Historical Research on Public Health. Since 2009 he is co-responsable of the Focus Music and Emotion of the National Center of Competence in Affective Sciences, Geneva. After a PhD in biochemistry in Rome, he has got a PhD in History and Philosophy of Life Sciences at the EPHE-Sorbonne, Paris, in 1992. Full Professor of the History of Medicine at the University of Geneva from 1992 to 2013. His main research subjects are the history of infectious diseases and international health, the epistemology of biology and medicine and the history of relationships between medicine, science and music.

Jeff French, PhD, MBA, MSc, DipHE, BA, Cert.Ed.
Strategic Social Marketing Ltd, UK

Prof. Jeff French is a global leader in Social Marketing and social programme planning and evaluation and health communication. Jeff has published over 90 papers and three books. Jeff is a Professor at Brighton University and a Fellow at Kings College London University. Previously Director of Policy and Communication at the UK Health Development Agency and a senior civil servant in the UK Department of Health. In 2005 Jeff led the UK government review of Social Marketing and set up the National Social Marketing Centre in 2006. In 2009 Jeff became the CEO of Strategic Social Marketing Ltd. Jeff has worked on behaviour change, health communication and social policy programmes in over 29 countries and has just completed a planning guide on social marketing for the European Centre for Disease Control. Jeff has worked on many occasions for WHO on health promotion and communication issues and is a member of the E-Com pandemic communication project funded by the EU.

Anat Gesser-Edelsburg, PhD
School of Public Health – University of Haifa, Israel

Dr. Anat Gesser-Edelsburg is the Head of Health Promotion Department, Haifa University School of Public Health, an adjunct lecturer at the Sammy Ofer School of Communications, IDC, and a senior researcher at the Participatory Social Marketing Program, Tel-Aviv University. Anat received her B.A. (Summa Cum Laude) and Ph.D. (with Distinction) degrees from Tel-Aviv University, and The Wolf Foundation Award for Ph.D. Students. She completed her postdoctoral research at The Minerva Center for Human Rights, the Hebrew University of Jerusalem's Faculty of Law following being awarded the Vidal Angel Postdoctoral Fellowship for Research against Hate and Bigotry. Anat research has been supported by many academic, NGO's and governmental institutions. She has co-authored Talking Pupils, a recommended textbook for criminology and sociology studies and Peace and Tolerance Encouragement among Youth by Using Theatre: Are Educational Plays an Important and Effective Tool? Which treats the multifaceted issue of peace through entertainment-education and theories of psychological health and wellbeing. Research interests: Health and risk communication, social marketing, entertainment-education, health promotion and persuasive communication.

Donato Greco, MD
ASSET Project – Zadig Srl., Italy

Dr. Donato Greco is a medical doctor specialized in Communicable disease, hygiene and public health, epidemiology and medical biostatistics. Working for 32 years in the National Institute of Health (ISS) of Italy where directed the Lab. Of epidemiology and biostatistics, then Director general of prevention at Minister of health for four years . As DG of Prevention at the Ministry of Health of Italy he was in charge of the Influenza Pandemic preparedness and as National Epidemiologist at ISS he investigated some hundred of epidemics in Italy and in several other countries, including a severe Ebola outbreak. He has intensive collaborations with WHO and the European Union , namely with the European Centre for Disease Prevention and Control. Actually, he is a senior research fellow on two large EU FP7 projects, TELL ME and ASSET as quality officer. He is author of more than 150 scientific publications and from many years teaching epidemiological methods in Italian universities. He was awarded of Italian gold medal for public health.

Manfred Green, MD, PhD
School of Public Health – University of Haifa, Israel

Prof. Manfred Green holds a BSc (Hons) in mathematical statistics from the University of Witwatersrand, an MSc degree in operations research and an MBChB (MD equivalent) from the University of Cape Town, and MPH and PhD degrees in epidemiology from the University of North Carolina at Chapel Hill. He is board specialized in public health, occupational medicine and medical administration. Between 1994 and 2008, he was director of the newly established Israel Center for Disease Control and was a full professor in the Sackler Faculty of Medicine, Tel Aviv University, headed the department of epidemiology and held the endowed Diana and Stanley Steyer Chair of the Prevention and Control of Cancer. Between 2008-2014, he was head of the School of Public Health at the University of Haifa and is currently a professor in the school. Research interests include epidemiology methodology, the epidemiology of chronic diseases, emerging infectious diseases, the prevention and management of potential bioterrorism incidents and health effects of climate change. He is member of a number of national councils, including those for the control of heart disease, vaccine preventable diseases, cancer and preparedness for emerging infectious diseases, bioterrorism and pandemic influenza. In addition, he is chairman of the scientific committee of the regional Research and Development Center in the Arab town of Kfar Kara. He is currently the coordinator of the TELL ME project.

Itamar Grotto, MD, MPH, PhD
Ministry of Health, Israel

Prof. Itamar Grotto is the director of the Public Health Services in the Israeli Ministry of Health. He is responsible for the operation of all preventive services and health promotion programs operated by the Israeli Ministry of Health. These activities include primary and secondary prevention programs, outbreak response, environmental health, food safety and health promotion among all health suppliers. Prof. Grotto is also affiliated with the Public Health Department of Ben-Gurion University in Israel. His main research activities are in the fields of infectious diseases epidemiology and health behaviors among adolescents and young adults, as well as public health policy development.

Anna Kolliakou, PhD
King's College London, UK

Dr. Anna Kolliakou has a BA (Hons) in Psychology (University of Essex) and an MSc in Clinical and Public Health Aspects of Addiction (Institute of Psychiatry, Psychology and Neuroscience - IoPPN, King's College London). After having served as a researcher on health services, genetic and addiction projects at the IoPPN, she joined the Psychosis Studies Department in 2008 where she completed a PhD on patterns of cannabis use in first-episode psychosis. Since the beginning of 2014, she has been working as a post-doctoral researcher on PHEME, an EC-funded project, which aims to model, identify and verify rumours as they spread across media, languages and social networks. Anna's role at the NIHR-SLAM Biomedical Research Centre at the IoPPN focuses on developing the mental healthcare branch of the project, where PHEME's new veracity intelligence methods will be tested and validated, through a series of case studies on legal highs, medication, self-harm/ suicide and stigma.

Simon Langdon
CEDARthree Ltd, UK

Mr. Simon Langdon, director of CEDARthree Limited, is an acknowledged authority on Crisis and Incident Management and is a winner of the CSI Business Continuity Consultant of the Year Award. Simon was part of the British Standard Institute (BSI) Working Group which developed the new standard for Crisis Management BS11200 which was published in May 2014. Simon has operational experience of responding to major incidents, including terrorism, in UK and internationally. He has worked with a number of major organisations including central and regional government, the European Commission, the Bank of England, the Financial Services Authority (FSA), the Bank for International Settlements (BIS), British Airways, the BBC, the UK Strategic Rail Authority and the European Patent Organisation. He has also worked in the oil and gas industry in the Middle East, in telecommunications, the Health Service and on the impact of climate change in South East Asia. Simon was chairman of the International Disaster and Emergency Resilience conference (IDER) which was held in April 2014 in Malmo, Sweden. (www.iderweb.org).

Pier Luigi Lopalco, MD
European Centre for Disease Prevention and Control (ECDC)

Prof. Pier Luigi Lopalco is Associate Professor of Hygiene and Preventive Medicine at the University of Bari (Italy). In 2005 he joined the ECDC, where has been Head of the Vaccine Preventable Disease Programme and is currently leading the Scientific Assessment Section. His research activity has been focused on infectious disease epidemiology and prevention. He is co-author of about 120 scientific articles in peer reviewed journals and several chapters in scientific textbooks. Recently he has co-authored a chapter in the textbook Vaccines 6th Edition by Plotkin S., Orenstein W., and Offit P.

Brian McCloskey, MD, FFPH
Public Health England, UK

Dr. Brian McCloskey has worked in public health at local, regional, national and international level over a period of 25 years. A director of public health in successive local health

authorities in England from 1988 to 2002, Brian then worked as Deputy Regional Director of Public Health in the Regional Government Office, West Midlands, with an interest in health protection. In 2004 he joined the Health Protection Agency with a remit for emergency planning and responsibility for cross government aspects of the agency's response to major emergencies. Brian was involved nationally in the HPA's response to the London bombings in 2005, and the Buncefield Oil Depot fire in 2005, as well as flooding incidents in 2007, and pandemic flu in 2009. In September 2008, Brian became Regional Director for the HPA in London where he had the lead role in planning for the 2012 London Olympics. Brian has been working with WHO's Mass Gatherings Advisory Group since 2008, helping develop their public health guidance and planning toolkit and is head of the WHO Collaborating Centre on Mass Gatherings working with mass gatherings such as the World Cup in South Africa as well as the London Olympics. Brian took on the role of Director of Global Health for Public Health England in April 2013. Brian acted as PHE's National Incident Director for Ebola when it became a national incident in 2014 and in October 2014 was seconded to work with the UN Special Envoy on Ebola, based in Geneva. In the January 2013 New Year's Honours List, Brian was awarded a CBE (Commander of the Most Excellent Order of the British Empire) for services to public health.

Toby L. Merlin, MD
Centers for Disease Control and Prevention (CDC), USA

Dr. Toby L. Merlin is Director of the Division of Preparedness and Emerging Infections in the National Center for Emerging and Zoonotic Infectious Disease at the US Centers for Disease Control and Prevention (CDC). In this role, he is responsible for the CDC's Laboratory Response Network (LRN), infectious disease emergency response coordination, and Emerging Infections Epidemiology and Laboratory capacity programs, Health Economics and Modeling Unit, and Arctic Investigations Program. He previously served as Deputy Director of the Influenza Coordination Unit and served as Deputy Incident Commander of CDC's Response to 2009 H1N1 Influenza. Dr. Merlin received his Bachelor of Arts degree in philosophy from Yale College and his Doctor of Medicine from the University of Florida. He served an internship at Stanford University Hospital and completed his training in pathology at the University of New Mexico. From 1984 until 1992 he served on the faculty of the departments of Pathology and Internal Medicine at the University of New Mexico School of Medicine, where he performed research in the molecular mechanisms of antibiotic resistance and was Associate Professor of Pathology, Vice-chairman of the Department of Pathology, and Chief of Laboratory Services at the Veterans Administration Hospital. Dr. Merlin has been a member and Chair of the Clinical Laboratory Improvement Advisory Committee (CLIAC). He has also served on the editorial boards of Human Pathology and the International Journal of Surgical Pathology, as well as various test committees on the National Board of Medical Examiners and committees of Clinical and Laboratory Standards Institute. Dr. Merlin joined CDC in 2003 from Lovelace Health Systems in Albuquerque, New Mexico, where he served as Senior Vice-President and Chief Medical Officer and an officer of the Board of Directors. Dr. Merlin also served as Chair of the Department of Laboratories and an elected member of the Medical Practice Board.

Valentina Possenti
Istituto Superiore di Sanità (ISS), Italy

Ms. Valentina Possenti is a researcher at the National Centre for Epidemiology, Surveillance and Health Promotion (CNESPS) of the Italian Institute of Public Health (Istituto Superiore di Sanità; ISS) since 2006. She finalized graduated studies in Communication and post-graduated in Health Economics. To date she has gained ten years of experience in working on national and international projects about epidemiology, surveillance and prevention, health promotion and communication which are based on wide-ranged professional networks. She is author and co-author of several articles, papers and contributions in reviews and conferences/congresses either nationally or internationally.

Paul Quinn
Vrije Universiteit Brussel, Belgium

Mr. Paul Quinn is currently a PhD candidate, and hopes to finalise his PhD in the coming year. His thesis concerns the Justiciability of Stigmatizing Public Statements Made by the State. Paul Quinn started as a researcher at the VUB in 2010. Since then he has worked on a number of European FP7 Research Projects including REACTION (involving the development of remote monitoring systems for diabetes), Moving Life (the creation of Roadmaps for the deployment of mHealth in Europe) and TELL ME (the development of strategies for vaccination communication). Paul has actively published in the last few years in the areas of cross border healthcare, privacy and safety in eHealth/mHealth and also on issues of stigmatisation. Paul is a (non practicing) Barrister in England and Wales and in addition to his legal degrees (LLM, MA) also has a bachelor degree in biochemistry (BsC).

Francesca Russo, MD
Hygiene and Public Health Promotion and Development Unit – Veneto, Region Italy

Dr. Francesca Russo is medical doctor specialized in Hygiene and Preventive Medicine, with 11 year-experience as Head of Infectious Diseases at the Local Health Authority Ulss 4 Alto vicentino. Since 6 years she is Director of Hygiene and Public Health Promotion and Development Sector at Veneto Region. In particular she is responsible for the surveillance and control of communicable and non communicable diseases. She is in charge of vaccination programs, coordination of cancer prevention programs, development and implementation of healthy life style programs for the population, coordination of action plans during emergencies and control of infectious disease outbreaks (e.g. West Nile disease, Flu, Ebola, etc.) or for environmental emergencies (e.g. contamination of drinking water by perfluoroalkyl substances). She sees to the development of training and communications plans as well as to the budget and human resources management allocated to her Sector". She is also responsible for coordination of interregional public health activities at ministerial level.

Alexander Talbott
Representing the British Medical Journal Publishing Group, UK

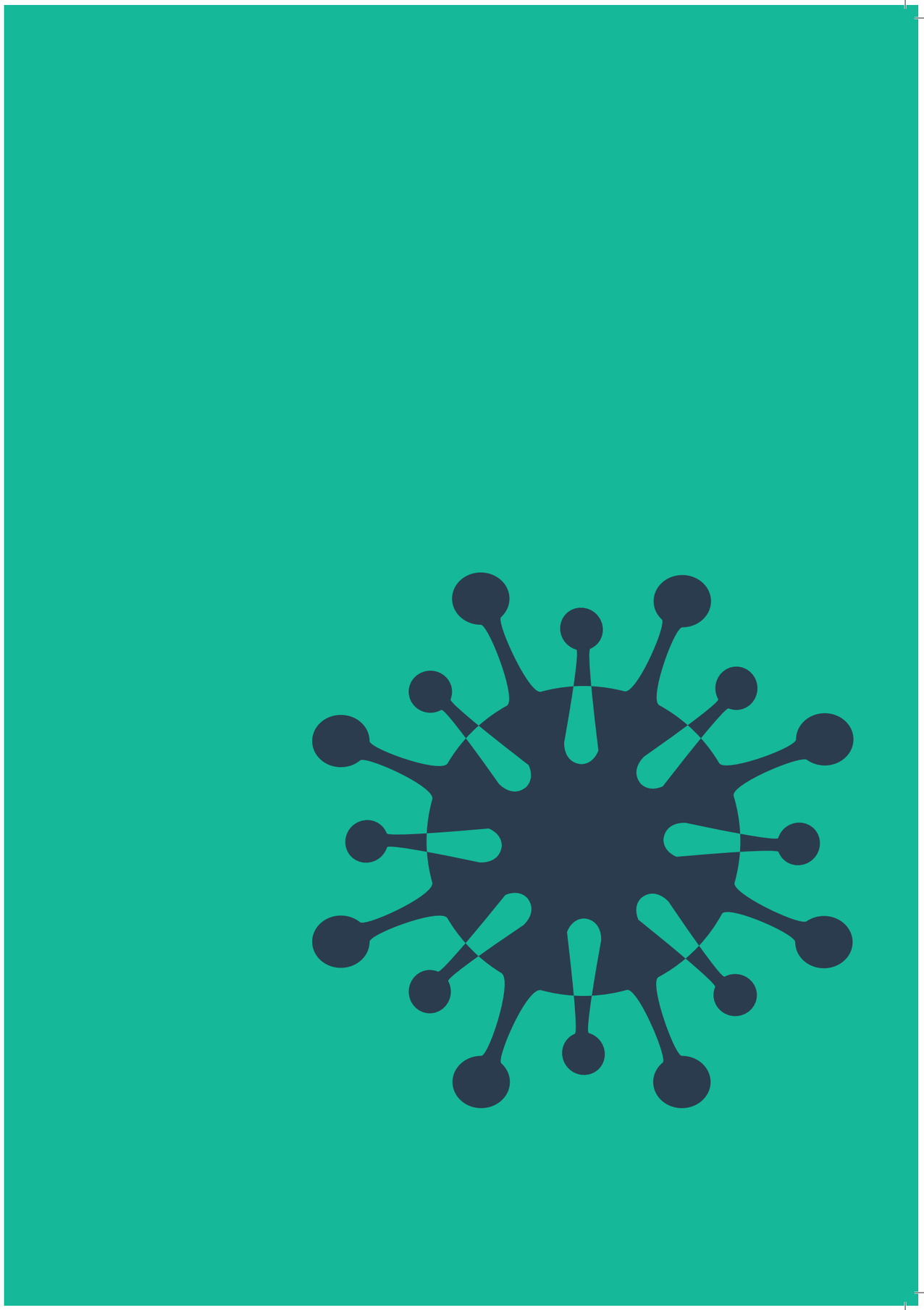
Mr. Alexander Talbott has a BSc in Biological Science and a Postgraduate Diploma in Strategic Communications in Healthcare and has interests in science communication, healthcare communication and genetic modification in agriculture. He has worked in NHS communications departments across healthcare commissioning and provider organisations. While working for the NHS Alex started the Twitter account @nhssm which brings together NHS staff and the general public to talk about social media use in the NHS. He now works as a freelance communications consultant with NHS and healthcare related organisations on a range of digital and writing projects.

Alberto E. Tozzi, MD
Bambino Gesu Pediatric Hospital, Italy

Dr. Alberto Tozzi is a pediatrician and an epidemiologist with experience in vaccine trials and in surveillance of infectious diseases. He has worked as a researcher with the Italian National Health Institute for more than 15 years. In this period he has worked in several projects concerning the prevention of nosocomial infections, HIV infection in children, and surveillance of transmissible diseases. In this area he had responsibilities in surveillance of enteric bacteria and haemolytic uremic syndrome, in surveillance of pertussis at the European level, and in supporting recommendations on immunization in cooperation with the Italian Ministry of Health. He has been part of the coordination group of a large clinical trial on acellular pertussis vaccines that involved nearly 16000 Italian children. He was also responsible for a study on the effect of thimerosal contained in vaccines on neuropsychological development of children, funded by the US Centers for Disease Control. In 2004 Dr Tozzi moved to the Bambino Gesu Pediatric Hospital, a large clinical and research centre where he joined the epidemiology unit. In this period he continued to work in vaccine preventable diseases with studies on the epidemiology of rotavirus, on conjugate pneumococcal vaccines and pneumococcal infections, on immunization of children with chronic diseases, on determinants of carrier state for MRSA in children, and on the immunological memory in children who received hepatitis B vaccines. He has been also a consultant for WHO for activities on polio eradication and for the investigation on a cluster of severe adverse events to vaccines in India. He is also a component of the Expert Vaccine Group of the European Center for Diseases Control. Dr Tozzi is associate editor of Frontiers in Public Health for Digital Health. He performed several KAP studies in different segments of the populations relevant to vaccine attitudes. He has been appointed as scientific responsible for communication of the Italian Pediatric Society and has used web social platforms for communication of scientific information to the general public. He is currently running a study entirely based on an internet platform, for the promotion of preconception counselling. His research activities are currently focused on mathematical models for explaining social contacts in a community and predicting the spread of infectious diseases. He has been affiliated to the American Medical Informatics Association, the Council for Communication and Media and the Council on Clinical Information Technology of the American Academy of Pediatrics. He has served in 2009-10 the Medical University of Tanzania as a professor in Clinical Epidemiology and preventive medicine for students in pediatrics. Dr Tozzi is currently responsible of the research area of Multifactorial Diseases and Complex Phenotypes and of the Telemedicine Unit of the Bambino Gesù Children's Hospital.

Notes

TELL ME Conference



For more information on the TELL ME project or to access the guidance documents and tools, please go to **www.tellmeproject.eu**

Alternatively, you can contact us on the details below.

facebook.com/pages/TELL-ME/313012712090705

twitter.com/TellMEProjectEu

villa@zadig.it

Vitamib (France)
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Contact: Olivier de Bardonneche, Gérard Brugal, Youssoufa Tahirou

BMJ Publishing Group Ltd (UK)
Website: www.bmj.com
Contact: Mitali Wroczynski, Luisa Dillner

CEDARthree Ltd (UK)
Website: www.cedarthree.co.uk
Contact: Simon Langdon

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Contact: Nigel Gilbert, Jennifer Badham

National Centre for Epidemiology, Surveillance and Health Promotion, CNESPS (Italy)
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Contact: Paul De Hert, Paul Quinn

National Disaster Life Support Foundation, NDLSF (US)
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School of Public Health at the University of Haifa (Israel)
Website: http://hw.haifa.ac.il/index.php/facultydeps/publichealth
Contact: Manfred Green, Anat Gesser-Edelsberg

Zadig Ltd (Italy)
Website: www.zadig.it
Contact: Roberto Satolli, Luca Carra, Roberta Villa, Dimitris Dimitriou

Designed by **Ross Harrington** & **Gary Green**

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 278723

ANNEX 2

LIST OF PARTICIPANTS

TELL ME CONFERENCE 4-5 DECEMBER 2014

LIST OF PARTICIPANTS

Name	Affiliation	Country
Jennifer Badham	Centre for Research in Social Simulation, University of Surrey	UK
Eva Benelli	Zadig Srl	IT
Michele Bellone	Zadig Srl	IT
Claire Bower	British Medical Journal Publishing Group (BMJ)	UK
Kjersti Brattekas	Norwegian Defence Research Establishment	NO
Annalisa Buoro	WHO European Office for Investment for Health and Development	INTL
Ilaria Capua	Istituto Zooprofilattico Sperimentale delle Venezie (IZSV)	IT
Luca Carra	Zadig Srl	IT
Mario Cuccia	Catania Regional Health Authority (ASP Catania)	IT
Cham E. Dallas	Institute for Disaster Management, College of Public Health, University of Georgia	US
Olivier de Bardonnèche	AbsisKey	FR
Barbara de Mei	Istituto Superiore di Sanità (ISS)	IT
Dimitris Dimitriou	Zadig Srl	IT
Nigel Dowdall	Civil Aviation Authority	UK
Kare Harald Drager	The International Emergency Management Society (TIEMS)	INTL
Karl Ekdahl	European Centre for Disease Prevention and Control (ECDC)	INTL
Anat Gesser-Edelsburg	School of Public Health, University of Haifa	IL
Bernardino Fantini	Institut d'Histoire de la Médecine et de la Santé, Université de Genève	CH
Lorenza Ferrara	Alessandria Local Health Agency	IT
Jeff French	Strategic Social Marketing	UK
Juan Manuel Garrote	General Council of Medical Associations of Spain	ES
Nigel Gilbert	Centre for Research in Social Simulation, University of Surrey	UK
Donato Greco	Zadig Srl	IT
Manfred Green	School of Public Health, University of Haifa	IL
Itamar Grotto	Ministry of Health	IL
Anne Gulland	British Medical Journal Publishing Group (BMJ)	UK
Kailash Gupta	The International Emergency Management Society (TIEMS) – India Chapter	INTL
Ferenc Hajnal	European Union of General Practitioners (UEMO)	INTL
Hessam Hessami	Université Grenoble Alpes	FR
James J. James	National Disaster Life Support Foundation (NDLSF)	US
Anhelita Kamenska	Latvian Centre for Human Rights	LV
Pania Karnaki	Institute of Preventive Medicine, Environmental and Occupational Health, Prolepsis	GR

Anna Kolliakou	King's College London	UK
Sally Langdon	CEDARthree	UK
Simon Langdon	CEDARthree	UK
Pier Luigi Lopalco	European Centre for Disease Prevention and Control (ECDC)	INTL
Rita Machado	World Health Organization (WHO)	INTL
Thierry Mertens	World Health Organization (WHO)	INTL
Brian McCloskey	Public Health England	UK
Toby L. Merlin	Centers for Disease Control and Prevention (CDC)	US
Javier Nespereira	Universidad de Valladolid	ES
Alice Pace	Zadig Srl	IT
Renata Papp	European Union of General Practitioners (UEMO)	INTL
Claudia Perelli	Venice Local Health Agency (ULSS)	IT
Vladimir Petrovic	Institute of Public Health, Vojvodina	SB
Alessandra Piatti	Lombardia Regional Health Authority	IT
Valentina Possenti	Istituto Superiore di Sanità (ISS)	IT
Paul Quinn	Vrije Universiteit Brussel (VUB)	BE
Thomas Robertson	The International Emergency Management Society (TIEMS) – USA Chapter	INTL
Elena Rocchegiani	Istituto Zooprofilattico Umbria e Marche	IT
Francesca Russo	Venice Prevention Directorate - Region of Veneto	IT
Angela Simone	Formica Blu Srl. – Science communication	IT
Alexander Talbott	Representing the British Medical Journal Publishing Group (BMJ)	UK
Elizabeth Tamang	Venice Prevention Directorate - Region of Veneto	IT
Alberto Tozzi	Bambino Gesù Children's Hospital	IT
Maria Rosa Valetto	Zadig Srl	IT
Roberta Villa	Zadig Srl	IT
Moya Wood-Heath	Community Resilience	UK
Mitali Wroczynski	British Medical Journal Publishing Group (BMJ)	UK
Francesco Zambon	WHO European Office for Investment for Health and Development	INTL
Francesca Zanella	Venice Prevention Directorate - Region of Veneto	IT

ANNEX 3

TELL ME CONFERENCE ON TWITTER

TWEETREACH SNAPSHOT FOR

#tellmefinalconf

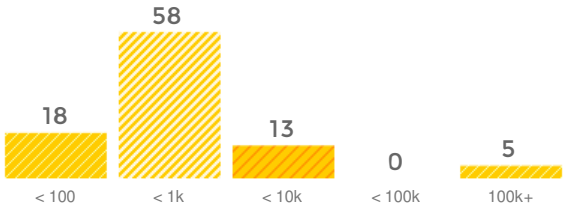
ESTIMATED REACH

154,245

ACCOUNTS REACHED

EXPOSURE

795,009 IMPRESSIONS



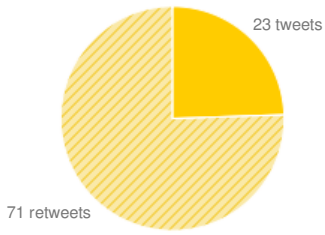
Bars show number of tweets sent by users with that many followers

ACTIVITY

94 TWEETS

57 CONTRIBUTORS

2 DAYS



TOP CONTRIBUTORS

750.8k IMPRESSIONS — @bmj_latest

33 RETWEETS — @TELLMEProjectEu

33 MENTIONS — @TELLMEProjectEu

MOST RETWEETED TWEETS

26 TELL ME @TELLMEProjectEu
Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf http://t.co/uU1nhAkZut

13 The BMJ @bmj_latest
MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #tellmefinalconf

8 clairebower @clairebower
Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http://t.co/P9OZh7X2kj

CONTRIBUTORS

	Tweets	RTs	Impressions
bmj_latest	5	13	750.8k
TELLMEProjectEu	17	33	5.5k
clairebower	7	21	5.2k
a_double_tt	3	4	5k
PromotionGOD	1	0	3.9k
Nudge2health	1	0	2.1k
Dottor_T	3	0	1.6k
KateAlvanley	1	0	1.5k
greenbergepi	2	0	1.5k
Turing2014	1	0	1.3k
trialia	1	0	1.3k
nordicgeo	1	0	1.3k
LordBexar	1	0	1.2k
DrDhaferKamal	1	0	1.2k
keelpno_gr	2	0	1.1k
MattDouglasVail	1	0	1.1k
Clairewynn	1	0	1k
Alterwired	1	0	796
tweetsdistilled	1	0	636
Paul_Barach	2	0	574
scientist05	1	0	546
fichetechnique	1	0	533
RVarmaMD	1	0	491
MwangiMartyn	1	0	467
Lineegrigie	1	0	301
HealthUKTD	1	0	300
kidney_md	1	0	300
PaulQuinnBxl	4	0	260
JuanxusMagnus	1	0	259
DrPhilipBraude	1	0	234
JimmyFinlayson	1	0	230
KhayyamAmer	1	0	226
MediSub	1	0	223
ppenttin	1	0	216
SuzanneJSchultz	1	0	208
Drazrael	1	0	194
hazetemple	1	0	183
Ezzoef	1	0	166
Furstrand	1	0	143
garden4u_wa	1	0	138
anabanana_1000	1	0	136
borthersi	1	0	116
LeonoreBarthel	1	0	108
ANWICU	1	0	101
RSiliquini	1	0	89
senji	1	0	86
IMYanXu	1	0	66
theonlinegp	1	0	63
amil_rios	1	0	61
MichielDamhof	1	0	47

TWEETS TIMELINE

Dec 5, 2014 at 10:06pm UTC

Paul DeOrd @LordBexar
RT @TELLMEProjectEu: Karl Ekdahl (@ECDC_EU) shows us how big is Africa with respect to #ebolaoutbreak #tellmefinalconf http://t.co/T2R95870…

Bahar Gholipour @Alterwired
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http…

Nordic Geospatial @nordicgeo
RT @TELLMEProjectEu: Karl Ekdahl (@ECDC_EU) shows us how big is Africa with respect to #ebolaoutbreak #tellmefinalconf http://t.co/T2R95870…

Philip Braude @DrPhilipBraude
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http…

Paul Quinn @PaulQuinnBxl
RT @TELLMEProjectEu: Karl Ekdahl (@ECDC_EU) shows us how big is Africa with respect to #ebolaoutbreak #tellmefinalconf http://t.co/T2R95870…

Paul Quinn @PaulQuinnBxl
RT @clairebower: Social media is key in debunking myths and providing early & accurate info to prevent myths in first place - Paul Quinn #…

Paul Quinn @PaulQuinnBxl
Innaccurate reporting by @guardian concerning vaccination at the #tellmefinalconf in #vennice concerning #vaccination http://t.co/o1BA9K9daQ

Paul Quinn @PaulQuinnBxl
A mask worn by Venitian doctors during the great 15th century #plague at the #tellmefinalconf in #venice #vaccination http://t.co/82ZiLpDGFX

Ana Mootoosamy @anabanana_1000
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http…

Dorthe Furstrand @Furstrand
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http…

Theonlinegp.ie @theonlinegp
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http…

Claire Anderson @Clairewynn
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http…

Rú-dána @fichetechnique
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http…

The BMJ @bmj_latest
RT @clairebower: Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf

pneumo_iasi	2	0	46
TonyMucc	1	0	27
lianne_grant	1	0	25
GlezNachogi	1	0	21
KristelDeG	1	0	8
71mdf	1	0	8
racimurphy	1	0	4

http…

clairebower @clairebower
Most searched qu re: folic acid -will it make me fat? Google reveals unexpected concerns of patients #tellmefinalconf http://t.co/P9OZh7X2kj

Martyn Mwangi @MwangiMartyn
RT @clairebower: Practical tips on social marketing and influencing people - findings from ECOM EU project: youtube.com/watch?v=_u5B-Q… #tellmef…

Rajeev Varma, MD @RVarmaMD
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

Yan Xu @IMYanXu
RT @clairebower: Practical tips on social marketing and influencing people - findings from ECOM EU project: youtube.com/watch?v=_u5B-Q… #tellmef…

Bahrain Vascular @DrDhaferKamal
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

NEED PROMO? @PromotionGOD
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Ian Borthwick @borthersi
RT @clairebower: Practical tips on social marketing and influencing people - findings from ECOM EU project: youtube.com/watch?v=_u5B-Q… #tellmef…

Clinica Pneumologica @pneumo_iasi
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The BMJ @bmj_latest
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clairebower @clairebower
Practical tips on social marketing and influencing people - findings from ECOM EU project: youtube.com/watch?v=_u5B-Q… #tellmefinalconf

TELL ME @TELLMEProjectEu
Roberta Villa @RobiVil presents our 2nd online course about #communicating #Ebola #tellmefinalconf http://t.co/JkL0eajzVx

TELL ME @TELLMEProjectEu
Roberta Villa @RobiVil: "nearly 85% of GPs are frustrated due to communication problems" #tellmefinalconf

Turing2014 @Turing2014
RT @clairebower: Social media is key in debunking myths and providing early & accurate info to prevent myths in first place - Paul Quinn #…

clairebower @clairebower
Great e.g. of influencers repurposing an official message for max engagement from @a_double_tt #tellmefinalconf http://t.co/m7kwHThcdh

Donna Maher @garden4u_wa
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

Michael Greenberg @greenbergepi
This looks up your alley #tellmefinalconf @ThomsonAngus

Michael Greenberg @greenbergepi
RT @clairebower: Human emotion is fundamental to all communication - particularly when dealing with epidemics - Bernardo Fantini #tellmefin…

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TELL ME @TELLMEProjectEu
RT @clairebower: Best practice for #riskcommunication from Kare Harald Drager (TIEMS) #tellmefinalconf http://t.co/b08vwGXKqn

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RT @clairebower: #Stigmatision is an evolutionary social antenna - receptive to signals denoting disloyalty, selfishness, weakness & diseas…

TELL ME @TELLMEProjectEu
RT @a_double_tt: K. Harald Drager - "the first lesson is we never learn". How can we help improving learning from past crises? #tellmefinal…

clairebower @clairebower
Social media is key in debunking myths and providing early & accurate info to prevent myths in first place - Paul Quinn #tellmefinalconf

clairebower @clairebower
#Stigmatision is an evolutionary social antenna - receptive to signals denoting disloyalty, selfishness, weakness & disease #tellmefinalconf

Alberto Tozzi @Dottor_T
RT @TELLMEProjectEu: Bernardo Fantini (Geneva Med School): "Emotion is a fantastic way to communicate" #tellmefinalconf

Alberto Tozzi @Dottor_T
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

Alberto Tozzi @Dottor_T
RT @TELLMEProjectEu: Bernardo Fantini (Geneva Med School):"Emotions r everywhere,in each kind of communication, scientist have to remember …

TELL ME @TELLMEProjectEu
Simon Langdon (CEDARthree) at #tellmefinalconf http://t.co/VSKzaLOISV

Paul Barach, MD, MPH @Paul_Barach
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

Esther van Zuuren @Ezzoef
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

Alex Talbott @a_double_tt
K. Harald Drager - "the first lesson is we never learn". How can we help improving learning from past crises? #tellmefinalconf

Jose Antonio Ruiz A. @Drazrael
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

clairebower @clairebower
Best practice for #riskcommunication from Kare Harald Drager (TIEMS) #tellmefinalconf http://t.co/b08vwGXKqn

roberta siliquini @RSiliquini
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

TELL ME @TELLMEProjectEu
K. Harald Drager: "Messenger & receiver have to understand the same message" = effective #communication #tellmefinalconf

clairebower @clairebower
Human emotion is fundamental to all communication - particularly when dealing with epidemics - Bernardo Fantini #tellmefinalconf

Yossef @hazetemple
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

TELL ME @TELLMEProjectEu
Bernardo Fantini (Geneva Med School):"Emotions r everywhere,in each kind of communication, scientist have to remember this" #tellmefinalconf

Victor Wallace @JimmyFinlayson
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

Tonsil Stone Removal @LeonoreBarthel
RT @bmj_latest: MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #…

The BMJ @bmj_latest
MT @a_double_tt: Venetian plague doctor mask is symbol of communication, as Ebola overalls are now http://t.co/eVPfyvu485 #tellmefinalconf

TELL ME @TELLMEProjectEu
Bernardo Fantini (Geneva Med School): "Emotion is a fantastic way to communicate" #tellmefinalconf

TELL ME @TELLMEProjectEu
2nd day #tellmefinalconf: Bernardo Fantini (Geneva Med School), talks about perception of epidemics in literature, art & music

Michiel Damhof @MichielDamhof
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus

#tellmefinalconf h…

Paras Dedhia @kidney_md
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Dec 5, 2014 at 12:00am UTC

ANWICU @ANWICU
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Rachel Murphy @racimurphy
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Senji @senji
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Pasi Penttinen @ppenttin
RT @TELLMEProjectEu: Karl Ekdahl (@ECDC_EU) shows us how big is Africa with respect to #ebolaoutbreak #tellmefinalconf http://t.co/T2R95870…

Tony Mucciarone @TonyMucc
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Kristel De Gauquier @KristelDeG
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Nacho Glez Iglesias @GlezNachogi
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Κ Ε Ε Λ Π Ν Ο_HCDCP @keelpno_gr
RT @TELLMEProjectEu: Karl Ekdahl (@ECDC_EU) shows us how big is Africa with respect to #ebolaoutbreak #tellmefinalconf http://t.co/T2R95870…

Κ Ε Ε Λ Π Ν Ο_HCDCP @keelpno_gr
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

AMILCAR @amil_rios
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Juan Antonio Serrano @JuanxusMagnus
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Dra.Beatríz Alvarado @71mdf
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Lourens Prins @MediSub
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Paul Barach, MD, MPH @Paul_Barach
RT @a_double_tt: Prof Karl Ekdahl: The human side of any infectious disease story is what brings the media. Need to work with pathos #tellm…

Tweets Distilled @tweetsdistilled
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Kate Ardern @KateAlvanley
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Suzanne Schultz @SuzanneJSchultz
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Trialia @trialia
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

amazing_amir @KhayyamAmer
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Lianne Grant @lianne_grant
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Matt Douglas-Vail @MattDouglasVail
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

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The BMJ @bmj_latest
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Alex Talbott @a_double_tt
Prof Karl Ekdahl: The human side of any infectious disease story is what brings the media. Need to work with pathos #tellmefinalconf

Michele Bellone @Lineegrigie
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

TELL ME @TELLMEProjectEu
Karl Ekdahl (@ECDC_EU) shows us how big is Africa with respect to #ebolaoutbreak #tellmefinalconf http://t.co/T2R95870xv

HealthUKDistilled @HealthUKTD
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

FahadArab @scientist05
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Abdul Razzaq @Nudge2health
RT @TELLMEProjectEu: Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf h…

Alex Talbott @a_double_tt
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TELL ME @TELLMEProjectEu
Karl Ekdahl,@ECDC_EU,says there R 2 viruses involved in #ebolaoutbreak: #ebola virus + #media virus #tellmefinalconf http://t.co/uU1nhAkZut

TELL ME @TELLMEProjectEu
Karl Erdahl, EuropeanCDC, introduces the risk communication aspects of #ebola outbreak at #tellmefinalconf http://t.co/v4fdrknlEP

Dec 4, 2014 at 6:27pm UTC