

Study Protocols

Crisis communication in the area of risk management: the CriCoRM project

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Significance for public health

The specific aim of the project is to develop a European strategy approach on how to communicate with the population and with different stakeholders groups involved in the crisis management process, based on an analysis of the communication process during the H1N1 pandemic (content analysis of press releases, press coverage and forum discussions) and on interviews with key stakeholders in health crisis communication. The development of web 2.0 tools, providing rapid responses will allow real-time verification of awareness of social trends and citizens' response. Furthermore, the project would like to offer these resources to the EU Public Health Institutions and EU citizens to improve their interaction, and hence reinforce citizens' right to patient-centred health care. The project proposal has been designed in accordance with the general principles of ethics and the EU Charter of Fundamental Rights with regard to human rights, values, freedom, solidarity, and better protection of European citizens.

Abstract

Background. During the last H1N1 pandemic has emerged the importance of crisis communication as an essential part of health crisis management. The Project aims specifically to improve the understanding of crisis communication dynamics and effective tools and to allow public health institutions to communicate better with the public during health emergencies.

Design and Methods. The Project will perform different activities: i) state of the art review; ii) identification of key stakeholders; iii) communicational analysis performed using data collected on stakeholder communication activities and their outcomes considering the lessons learnt from the analysis of the reasons for differing public reactions during pandemics; iv) improvement of the existing guidelines; v) development of Web 2.0 tools as web-platform and feed service and implementation of impact assessment algorithms; vi) organization of exercises and training on this issues.

Expected impact of the study for public health. In the context of health security policies at an EU level, the project aims to find a common and innovative approach to health crisis communication that was displayed by differing reactions to the H1N1 pandemic policies. The focus on new social media tools aims to enhance the role of e-health, and the project aims to use these tools in the specific field of health institutions and citizens. The development of Web 2.0 tools for health crisis communication will allow an effective two-way exchange of information between public health institutions and citizens. An effective communication strategy will increase population compliance with public health recommendations.

Introduction

Health crisis management is a field of public health with specific characteristics in terms of relevance, linked to the huge possible impact on people's lives and social texture, and of global dimension. Indeed, health crisis situations by nature have the potential to disrupt social structure, putting many lives at risk and affecting both public health and wider socio-economic aspects.¹

It has been shown that adequate preparedness is the only way to limit harm and damage and prevent risks. Therefore, it is important to ensure that society at all levels is prepared.

The European Commission has taken this notion into account in its recent proposal for a decision of the European Parliament and of the Council on serious cross-border threats to health.² On 15 September 2009 the Commission adopted a strategy paper during the H1N1 pandemic 2009. The Commission worked in five strategic areas: vaccine development, vaccination strategies, joint procurement of the vaccine, communication with the public and support of non EU countries.³

During the pandemic the importance of crisis communication has emerged as an essential part of health crisis management. Public health institutions have to be prepared to face health crises and the general public has to be involved and actively follow the recommended measures. Prevention of risk and damage are limited by the adequate preparedness at all levels. Throughout a health crisis, the population urgently requires up-to-date information that needs to be provided by public institutions.⁴ All of them, no matter if on local, national or international levels, should provide rapid, clear and transparent information. Hence, it is obvious that the communication strategy is an essential part of crisis response for two reasons: on the one hand as part of the crisis management process during health emergencies; on the other hand to increase population compliance with public health recommendations. In order to avoid missing the lessons that can be learnt from the H1N1 experience, it is fundamental to analyse what happened, placing it in the context of the theoretical framework that comes from communication sciences and health psychology.⁵

This translational research will allow experts to identify areas of improvement in the existing guidelines for crisis communication, by analysing the existing evidence on strategies performed by public health institutions and their results in terms of news coverage and achievement of the established goals. This project will also analyse the media coverage of European newspapers during the H1N1 (2009-2011), the press releases of international organizations and one health portal of each selected country. The routines of stakeholders in this kind of situation will be analysed as well. With all this information, CriCoRM project will have all the necessary evidences for better



improving the existing guidelines in risk situations. This process will take the potentials and limitations of social media, specifically Web 2.0 tools, into account as currently studied in the project Empowering the Public with Information in Crisis (EPIC)⁶ supported by a grant from the US National Science Foundation and other EU projects financed under Seventh Framework Programme (FP7) or under Directorates-General (DG) and Service Home Affairs (HOME).⁷

Project aims

The primary aim of the Project on Crisis Communication in the area of Risk Management (CriCoRM)⁸ is to improve health crisis communication and thereby to strengthen health security during emergencies. The specific intent of the project is to improve guidelines starting from the analysis of existing ones and integrating them with lessons learnt from the H1N1 pandemic and other recent crises like the Enterohaemorrhagic Escherichia Coli (EHEC) outbreak⁹ and the Fukushima event. These actions will allow the implementation of effective communication strategies by the key stakeholders involved in health crisis management. In particular, the project will consider the need of an European approach to resolve the problem, in the context of the Health Security Committee of the Communicators' Network, by the creation and promotion of key stakeholders' interaction, using the analysis of at-risks groups and the use of new social media network. The intent is to collaborate with other European Union and WHO agencies as well as with other existing projects financed by other DGs on crisis (Research and Technological Development, HOME).⁷

Design and Methods

Target groups

The project focuses on two different kinds of target groups that will be positively affected: entities (key stakeholders) and at-risk groups within the population. Key stakeholders include public health institutions and their networks, consumer associations, health professional associations, patients groups and the media. Target public health institutions will be at an European level and at a national level (*e.g.* health ministries), to regional and local health authorities. Collaboration with consumer associations would allow helpful interaction with a particularly active and involved sector of the population. The media's role as a communication channels between institutions and the public makes them an important factor in informing the public about risks and influencing their risk behavior.⁵

In order to involve people difficult to reach (homeless, socially disadvantaged citizens) the project aims to collaborate with local government and voluntary organizations engaged already working with people in difficulties, to implement the most effective strategies on the basis of the existing knowledge.

The CriCoRM partnership was built on the root of the project topic determinants, and brings together several entities with different competencies and backgrounds, and a common overall objective, to be achieved by means of synergetic activity.

Methods

The project started the 1st of June 2012 and will finish the 31st of May 2015. The project was structured with seven different work packages (WPs). There are three Horizontal WPs: Coordination of the project (WP1), Dissemination of the project (WP2) and Evaluation of the project (WP3).

Coordination of the project is responsible for management of the

project and aims to make sure that it is implemented as planned. The aim of the *Dissemination of the project* is to ensure that the results and deliverables of the project will be made available to the target groups. Actions undertaken by the *Evaluation of the project* are necessary to verify if the project is being implemented as planned and reaches the objectives. Figure 1 describes the specific objectives of the work packages.

There are four Core WPs: Analysis of communication processes (WP4), Guidelines development (WP5), Implementation of Web 2.0 tools for crisis communication (WP6) and Training (WP7).

Analysis of communication processes (WP4)

The WP4 consists of three specific objectives: *State of the art review*, *Identification of key EU stakeholders* and *Communication analysis*.

State of art review: with regard to the state of the art review, the project will take into account experiences from multi-sector work at the EU level, and also valuable work from outside the EU, such as US Centres for Disease Control and Prevention (CDC) and World Health Organization (WHO). The scientific literature review will explore existing evidence on the theoretical background in the field of health crisis communications, as well as the use of Web 2.0 tools in public health crisis situations. The state of art review will be taken on board outcomes of work in this field from DG for Communication, food safety, animal health, chemicals, medicines, civil protection, DG Home and Radio Nuclear sectors. Translational research perspective will be explored by the institutional documents (grey literature) in order to identify existing guidelines on crisis communication, and evaluations and reports on the communication strategies performed during the H1N1 pandemic.

Identification of key EU stakeholders: this phase of the project will start with the entities that produced communication material about H1N1 pandemic identified in the first step in order to identify key stakeholders at an EU level and at national levels of the following countries: Belgium, Czech Republic, France, Germany, Italy, Portugal, Romania, Spain, Sweden and UK. Other stakeholders defined in the target groups, such as public health institutions from a European down to a local level, consumer associations and the media, will be contacted and involved during this phase.

Communicational analysis: the reasons for differing public reactions to the measures taken to control H1N1 will be analysed on the basis of data collected on stakeholder communication activities (via already available evaluations and reports, as well as qualitative interviews and a standardized online survey) and data on communication activity outcomes (*e.g.* by a quantitative content analysis of press releases, press coverage and forum discussions). This process will enable us to identify the potentials and the limitations of different communication measures against a background of cultural differences, in order to increase public confidence in recommended interventions.

Guidelines development (WP5)

On the basis of the evidence found at step one (literature review and evaluation reports) and step three (data collection from involved entities and translational research from the theoretical background to the effective communication performed strategies) the guidelines will be developed. The work will produce suggestions for improving existing guidelines on all type of health crisis communication focusing not only on the flu pandemic but also on other health emergencies. In particular, the intent will be to improve the existing guidelines providing hints to harmonized similar messages across EU Member States. The production of guidelines will begin from the analysis of the existing ones [taking into account the Health Security Committee (HSC) Communicators' Network tool kit]¹⁰ and they will be integrated with the lessons learnt from recent crisis situations.

Implementation of Web 2.0 tools for crisis communication (WP6) Another important aim of the project is the use of new social media



WP1 Coordination of the project: - actions undertaken to manage the project and to make sure that it is implemented as planned

WP3 Evaluation of the project: - actions undertaken to verify if the project is being implemented as planned and reaches the objectives

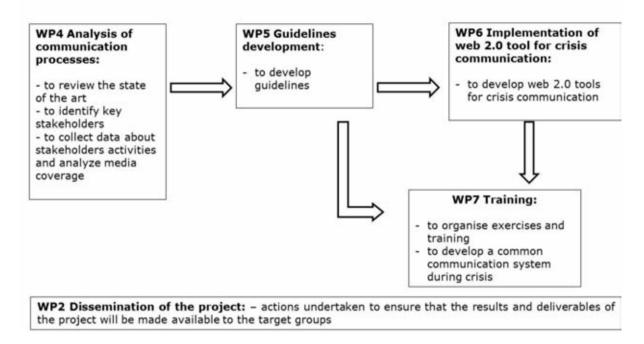


Figure 1. Description of the work packages of the CriCoRM project.

tools (Web 2.0) for disseminating health messages to the public and monitoring their impact in real time. To do this a web-platform will be developed, for publishing crisis communication messages and disclosing them to large communities via existing social networks, and a feed service, that can be subscribed to by news agencies, newspapers and media. It will also be implemented with impact assessment algorithms to evaluate the tools, and then to validate the platform. The choice of using web 2.0 tools is linked to the fact that they have, by nature, the huge potential to communicate with the public in a two-way manner and get immediate feedback, allowing the institutions to understand the fears and needs of the public and the response to their messages and even get information about what is happening among the population. Furthermore, they can be adapted to any different bio-threats and national context due to their high versatility.

Training (WP7)

The exercises and training under the project will be organized inviting also the EU HSC Communicators' Network. The training will help to develop a common communication system and strengthen common communication capabilities. During the implementation of this work package, the needs of target groups (which may vary on the basis of different types of crisis) will be identified, with the development of training modules, and implementation of training courses and exercises at a national/EU level. Regarding training and exercises, training features will be defined, training modules will be developed (available for free) and the implementation of the training course will include a one day workshop and e-learning modules.

Consortium partners

The Project partnership brings together five entities with different

competencies and a common overall objective. The coordinator of the project is the Local Health Authority of Brescia (ASL Brescia), leader of WP1 and WP2. The four co-beneficiaries are: University of Brescia (UNIBS), leader of WP3; Ludwig-Maximilians-Universität München (LMU), leader of WP4; Universidad de Murcia (UMU), leader of WP5, and Inovamais (INOVA+), leader of WP6 and WP7.

Main outcome benefits and brief discussion

The whole process of the CriCoRM project will allow the development of a common communication system and strategies during serious cross border threats to health and strengthen common communication capacities during a pandemic and other health crisis. This will ultimately increase population compliance to public health recommendations, leading to a mitigation of the event's impact. The existing lessons learnt from recent events such as the H1N1 pandemic influenza, the EHEC outbreak in Germany and France, the Fukushima events and others have shown that an effective communication strategy will increase population compliance with public health recommendations. Communication to the public becomes essential in health crisis management, particularly in the field of infectious diseases, where people's behaviour can make the difference. These objectives will be achieved through the betterment of the existing guidelines for health crisis communication and the improvement of the European network dedicated to it. In order to improve a European network, a great effort will be made to identify and establish a relationship with key stakeholders and the media, to guarantee the effective transmission of coherent messages

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to the public. We will consider the need for a European approach to the problem, interaction with key stakeholders, and the use of new social media, giving great importance to Web 2.0 tools.

Ethical and legal aspects

The grant agreement has been approved by the Executive Agency for Health and Consumers (EAHC), acting under powers delegated by the Commission of the European Union (AGREEMENT NUMBER 2011 11 02).¹¹ The project does not need an ethical approval.

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Contributions: CS, LA, GO are responsible of coordination and dissemination of the project; UG, LC, EL are involved in the evaluation of the project; CR, LZ, LM carry out the analysis of communication processes; LGJ and JCL are involved in the development of guidelines; JC and JS are responsible of the implementation of Web 2.0 tools for crisis communication and training. Conflict of interests: the authors declare no potential conflict of interests.

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References

- 1. World Health Organization. Toolkit for assessing health-system capacity for crisis management. Available from: http://www.euro. who.int/__data/assets/pdf_file/0008/157886/e96187.pdf.
- European Commission. Proposal for a decision of the European Parliament and of the Council on serious cross-border threats to health. Available from: http://ec.europa.eu/health/ preparedness_ response/docs/hsi_proposal_en.pdf.
- 3. European Commission. Directorate-General for Health & Consumers. Pandemic (H1N1) 2009. Available from: http://www.ec. europa.eu/health/communicable_diseases/diseases/influenza/h1n 1/docs/factsheet_h1n1_march2010_en.pdf.
- 4. Center for Disease Control and Prevention. Crisis Emergency + Risk Communication 2012 edition. Available from: http://www.emergency.cdc.gov/cerc/pdf/CERC_2012edition.pdf.
- Council of the European Union. Press Release 3032nd Council meeting. September 2010. Available from: http://www.consilium. europa.eu/uedocs/cms_data/docs/pressdata/EN/genaff/116489.pdf.
- 6. Project EPIC. Empowering the Public with Information in Crisis. Available from: http://www.epic.cs.colorado.edu.
- European Commission. DGs Home Affairs. Available from: http:// www.ec.europa.eu/dgs/home-affairs/index_en.htm.
- 8. The CriCoRM Project. Available from: http://www.cricorm.eu.
- 9. World Health Organization. International Health Regulations. Outbreaks of E. coli O104:H4 infection. Available from: http://www. euro.who.int/en/what-we-do/health-topics/emergencies/international-health-regulations/outbreaks-of-e.-coli-o104h4-infection.
- European Commission. Directorate-General for Health & Consumers. Public Health. Available from: http://ec.europa.eu/ health/preparedness_response/docs/gpp_technical_guidance_doc ument_april2011_en.pdf.
- 11. Executive Agency for Health and Consumers. Health Programme. Project Database. Available from: http://ec.europa.eu/eahc/projects/database.html?prjno=20111102.