

## Assessment of communication needs and planning communication actions during health crises

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### Abstract

Health crisis communication (HCC) is a challenging and urgent task of the emergency preparedness planning of any welfare state. In this paper some particular reasons for that will be more specifically analyzed. The action flow of HCC includes the phases of preparedness, warning, response, recovery and evaluation. For a successful HCC detailed guidelines are also needed, along with profound knowledge of how the crisis stakeholders should deal with the psychological needs of the citizens and the mass media, as well as with some specific technical items. The ultimate implication of HCC is that the public is aware of its right to make informed choices after having been actively involved in the procedure of risk decisions making.

**Keywords:** Health crisis, crisis communication, preparedness, public emergencies

### Introduction

#### Crisis communication meaning

Crisis communication refers to the production, assessment and interactive exchange of information and messages with the public and institutions, concerning specific risks and hazards, before, during and after a hazardous incident (1). It aims to reduce damage, initiate recovery, manage responsibilities, promote support and justify all required actions (2); it also aims to inform the public concerning an emergency, identify and avoid risks and adverse outcomes, stir actions and thus to protect both individuals and the whole community from the consequences of a crisis incident (3). Furthermore, crisis communication refers to the coordinated efforts on behalf of crisis stakeholders to afford urgent, often incomplete or unverified, information to the public, under extreme time pressure and with unpredicted outcome, ultimately helping the public to accept the imperfect nature of alternatives during a critical situation (4).

#### Guidelines for communication during health crises

HCC is a challenging task due to the needs for a large scale response of various stakeholders, the limited and compressed time span of required actions, the diffusely uncertain or unstable situation -at least in the beginning of the crisis- and the emotionally unforeseen reactions of the public under stress (3). Fast and understandable information leads to high quality crisis decisions, whilst misinformation or communication collapse can make a health crisis even worse and increase damage (5). Practical guidelines for HCC are the following:

1. Communication network establishment, aiming at various stakeholders and public groups (6);
2. Recognition of the inherent uncertainty of emerging risks (7);
3. Paying attention to public perceptions and fears of the danger (8);
4. Honesty, compassion and credibility (9);
5. Provision of self-efficacy messages to the public, for physical and psychological protection against the consequences of crisis (7, 9);
6. Maintaining accessibility for the media, to act appropriately (10);
7. Continuous evaluation and revision of crisis mitigation planning, along with testing of validity of theories and concepts, to prevent similar future challenges (11).

#### Psychology of HCC

Health crises and emergencies tend to take a grave toll on human lives due to their complexity, to the radical changes of routine, and the high degree of uncertainty they introduce in normal life (2). Even more, when crises are manmade, they tend to raise even stronger psychological and emotional reactions (12). In such crises the affected population tends to receive and process data and act according to crisis information in a different or even exaggerated way in comparison to what they are used to do



in normal life (13). Thus, in order to achieve an effective crisis communication and to reduce the psychological impact of a hazardous incident, three psychological levels must be deeper apprehended by the health crisis managers: The physical level, that focuses on the public's basic requirements for food and shelter, the psycho-social level, that focuses on social and psychological requests for family and society support and the interpretative level, that focuses on the means by which various social, cultural, economical, etc, groups apprehend messages and process crisis information (14). From the psychological point of view the health crisis messages should be:

1. Simple, otherwise under the intense stress and possible information overload the key message may be lost or misinterpreted (15);
2. Consistent and convincing; it should come from credible sources and be repeated to maintain public composure;
3. Adhered to current beliefs; counterintuitive instructions, such as evacuating a seemingly, or for nonce, safe area need delicate communication approaches (16);
4. The first to be received; people under stress tend to believe the first message, either rumor or reality (17);
5. Sent on multiple communication channels; people want always to verify the validity of risk messages (18);
6. Focusing on practical steps and on specific protective actions (19).

### **Crisis communication actions flow**

For a successful HCC, credibility, trust and accuracy of information are required; these result from fast transmission of clear and realistic instructions in ordinary language, in a reassuring, non-dogmatic and prioritizing way. Moreover, dignity, protection of privacy and confidentiality in the handling of sensitive personal data are also necessary, along with special care in avoiding the "infodemic" status, i.e. confusing facts with fiction, partly due to the dissemination of an enormous amount of inaccurate or misleading information that is aided mainly because of the global distribution of the social media. Nevertheless, the chain of generally non-confidential crisis information should include easily apprehensible clinical and epidemiological details -when available-, along with explicit communication channels, yet discouraging undue panic reactions from the public (20). Underneath follow the five main phases of HCC management:

#### **1. Preparedness**

The communication in the preparedness phase gathers information concerning the public's comprehension and behavior towards a health crisis situation along with its trust to authorities. Scientific experts are usually accepted by the public as more effective and credible spokespersons than ordinary politicians. Concerning in particular the public, better compliance with preventive measures and overall better preparedness outcomes are correlated with older age and higher socioeconomic status, as well as broad

family, social and interpersonal networks (21), female gender (22), urban place of residence versus rural areas (19) and perhaps most of all, the trust in the messages from public authorities (23). To accomplish an integrated pre-crisis communication strategy, the following targets should be identified (24, 25):

1. Clear objectives are set and needs are assessed;
2. National and international laws and guidelines regarding crisis communication are reviewed;
3. An integrated crisis communication plan involving detailed reporting protocols in multiple channels is formulated and periodically reviewed;
4. Crisis communication monitoring mechanisms along with relative tests and simulations are carried out to assess the effectiveness of the communication system and to verify and fix potential operational flaws before emerging a real crisis situation;
5. Detailed and updated databases of relevant stakeholders and health care individuals are prepared and a broad communication network is established;
6. Functions and responsibilities of involved operational branches and communication teams are defined;
7. Official communication delegates are designated and trained to effectively manipulate the mass media, to maintain their accessibility to facts and to motivate the public to positive actions;
8. Communication channels with all community structures and cultures are planned to distribute valuable information, also incorporating the necessary feedback;
9. Special emphasis is given to identify vulnerable groups or specific target populations;
10. Suitable prominent personalities and celebrities are enlisted, who may share information and support communication efforts through campaigns, public statements, etc.

During the preparedness phase three sets of communication are required: Broad and detailed information, i.e. what exactly has happened, what is going to be done next; practical directives for the population, i.e. what to do and what not to do; and key messages, i.e. how people can find help and maintain their self-control. And all these message sets must be repeatedly issued on multiple communication channels to allow efficient distribution and to ensure sufficient absorption of information of all social, economical and educational classes (25).

#### **2. Warning**

The pre-crisis warning period is a rather challenging and mostly brief, latent period which lasts between the identification of an oncoming threat and the time point when the threat presents its full potential. In sudden crises this period may often not appear at all; such sorts of crises emerge, or better erupt without previous warning signs. Major challenges of the warning period are first, the motivation of the community and state to appropriate

measurements and second, the preparation of steps and procedures necessary for the following stages of the evolving crisis. The media, which regularly cover the crisis on a 24h/7d basis, may well be used as a valuable assistant tool to the communication management (24).

### 3. Response

The emergency response period is the core phase of the crisis outbreak. Major communication challenges of the response phase are the mobilization of personnel and resources and the skilful motivation of specific actions and procedures to aid in damage minimization, operating under constantly changing conditions. More specifically in that phase (24):

1. Consistent and clarified crisis information is obtained and the severity of the situation is determined;
2. The crisis leader is thoroughly informed;
3. Trust and realistic expectations are promoted;
4. Messages, preferably pre-prepared and optimistic, are distributed to the public;
5. The media-contact delegates are activated to monitor the information flow from the media, to ensure correctness and promptness of official crisis information and also to establish a bidirectional communication between the media and the public;
6. Appropriate press-rooms and spokespersons are activated; the latter start continuous information for the public about appropriate actions they should undertake and they furthermore fight potential noxious rumor dissemination; moreover the spokespersons organize meetings with opinion leaders from public and private stakeholders;
7. Call centers are activated along with a variety of information channels, e.g. dedicated phone hotlines, live radio/television broadcasts and continuously updated web pages.

### 4. Recovery

In that phase mental and physical recovery of the affected population, along with reconstruction of infrastructures is the only way to get back to the stage of routine. Relevant communication challenges are (24):

1. Positively informing the public that the danger has faded away -or is on the way to it- and that normal health services are being resumed;
2. Encouragement of the public to continuously support the response stakeholders and the resiliency efforts of the society, also avoiding in that time to assign responsibilities and blames for the crisis incident.

### 5. Evaluation

The principal challenges in this period are to assess the effectiveness of the entire crisis communication system, the lessons learned in each of the previous phases, as well as the mistakes in actions of preceding phases, so that the best practices in future responses to be documented. These have to be done in a systematic way so that preparedness for

similar future incidents to be accomplished based on collected data from previous phases, by implementing the necessary structural changes and reformations and by decisive reallocation of funds and budgets (24).

### Citizens

According to CDC, the emergency crisis information to the citizens is defined as “the ability to develop, coordinate, and disseminate information, alerts, warning, and notifications to the public and incident management responders.” (26). During health crises, emergency communication to the public is critically important; thus to be efficient, health crisis communication needs a deep apprehension of the target population, which is often a notably diverse cultural mosaic, as regards not only language and socio-economical parameters, but also the psycho-social perception of the very danger (23). Communication inequalities are translated into differences among individuals and social groups in terms of apprehending and utilizing crisis information (27). By knowing those cohorts translates into comprehension of prejudices and false perceptions concerning the proper behavior of each population group towards crisis. That apprehension also includes knowledge of who are the disabled, chronically ill and medicated people, the immigrants and all other sorts of vulnerable population cohorts. The knowledge of the public relies on various information sources, such as existing demographic data, case studies, or statistical research resulting from social sciences, insurance agencies, governmental departments and academic institutes (14).

### Media

Mass media have a central role in risk communication (28, 29); the reaction of the public is heavily determined by media coverage (13), since those have the power to convert a minor event into a genuine crisis incident. Although well-documented research proved that the source and the form of information do actually influence the behavior of the public towards health crises (30, 31), trust to the media is especially important in situations of extreme hazards where the public feels they have no personal control over critical risks (32). During health crises vital preventive and supportive relevant information may be disseminated through many communication channels to different receivers (33). Prompt communicational response is herein necessary because the media habitually lurk for rapid information sources (34) and it is thus improbable that there will be any time delay between a major incident and media coverage. Furthermore, according to empirical studies, the social media platforms may well engage the public in rapid response reactions in such cases (35, 36) and yet individuals seem then to prefer sharing crisis information via interpersonal social channels than via private personal communication (37). Important issues to be considered in addressing health crisis messages to the public are (14):

1. High levels of message uniformity, with a minimum number of spokespersons; the principle is valid mostly in relatively homogenous populations;

2. A multi-voice, multi-language approach, addressing to rather heterogeneous societies;
  3. Clear, scientifically solid and unambiguous messages, with special care to avoid inconsistencies and disagreement among health crisis experts; the key-message should be simple and easily conceivable even from non-experts and should give practical guidelines for stepwise actions of the public to confront the threat;
  4. Above all, the main message should be honest and credible; truth should always be told at any cost, in any phase of the actions and in all situations; vital information should never be withheld on grounds of concerns that it might provoke panic.
3. A medical analysis system, for automated information verification to avoid heterogeneous, ambiguous or unverified data collection or duplication of verified data and to control massive data overflow.
  4. A sophisticated system for continuous surveillance of sensitive or strategic civil areas (e.g. cities or forests), with broad camera-surveillance networks based on advanced, interactive, interconnected and interworking mapping applications, which after electronic data-flow processing, trigger actions according to certain hazard thresholds.

### Technical items

Operational branches required in health crisis communication are at minimum the following:

1. A Crisis Telecommunication team, which utilizes emergency crisis communication services and infrastructure to share urgent crisis information among delegates from national and international operational stakeholders from both public and private health agencies.
2. A Data Management team, which gathers data and controls the operational information sharing for proper mobilization of resources and for coordination among relevant experts and stakeholders from both country-level and international stakeholders, such as the E-CDC or the WHO.

The necessary high technology communication infrastructure and equipment should be available before the health crisis. That equipment should be potent, efficient, all-weather resistant and self-sustained; it should be also able to provide timely and continuous web-based information flow and accurate data management on a 24h/7d basis, according to high level security standards. Such equipment should include dedicated computers, printers, fax machines, specific software programs, internet servers, landline phones and CB radios -in case of a cell phone network overload/collapse-, along with a portable generator-based and UPS-supported power supply. Importantly, integrated and professional audio-visual equipment, such as TVs, portable microphones, sound systems, projectors, screens and recording devices, is required for press-conference purposes. Among the various technical challenges in the communication chain the following might be listed:

1. A fast Early Warning and Alert System (EWAS), for the coordinated recall of health staff during health crises emergency.
2. An information sharing platform to allow for data exchange to multiple receivers in unified format; such is the Global Disaster Alert and Coordination System (GDACS), aiming to facilitate world-wide disaster information exchange beyond cross-national organizational and bureaucratic boundaries (38).

### Conclusions

The communication in health crises is a critical component of the emergency preparedness planning, regarding unexpected and devastating events, requiring urgent actions in a narrow time span and is thus a challenging task for any welfare state. Ultimate implication of the crisis communication planning is that the public has the right to make informed choices after actively involved in risk decisions implementation.

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