

EDITORIAL (Carmelo Scarcella, ASL Brescia)

This newsletter is the follow up of a path which was born and has developed with the "Healththreats" Project: a support system for decision-making in the management of health-threats and crisis situations", promoted by an international consortium and coordinated by ASL (the local health authority) in Brescia and partially financed by the European Commission.

This project has provided a "package" which includes Processes, Support Systems for the decision making and training aimed at identifying a model for the management of a Public Health crises situation able to give support to those responsible for making strategic decisions about intervention in facing health threats and in particular influenza pandemics.

The project was concluded in September 2010 and among its functions also created a website and newsletter which as was decided by the partners aims at supporting any further development in Emergency in Public Health, concentrating firstly on Infection Emergencies.

The newsletter has the educational purpose of offering some useful information, for various reasons, in the field of health emergencies. The newsletter has the educational purpose of offering useful information for various reasons, in the field of health emergencies providing the necessary contacts for possible follow ups and applicable information as well as other initiatives.

This first issue discusses:

- 1) **Health and risk.**
- 2) **The chikungunya virus infection. A real for Europe?**
- 3) **The guidelines for online communication in connection with the safeguarding and promotion of health.**
- 4) **Information technology and crises management : a very active research community.**

Regarding the ceaseless reality of diverse emergency situations in Public Health, I hope to offer interesting and stimulating suggestions on in depth themes often in the centre of public opinion.



HEALTH AND RISK (Claudia Zanini and Sara Rubinelli - University of Lugano)

In this article we'll try to answer the following questions:

- What do we mean by the term health?
- What must we pay attention to when we read information concerning risk?

We propose two concrete examples to guide us in our explanation. We take the example of the smoker and lung cancer. Medical Research affirms that cigarette smoking is one of the most important risk factors in lung cancer. In the website of the Italian

Association of research on cancer one reads the following: "It has been proved that a man of the average age of 35, who smokes more or less 25 cigarettes a day, is at risk of dying of lung cancer before the age of 75 at a level of

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13%.” While in the website of the Tobacco Union of the Department of Public Health at the La Sapienza University in Rome one reads the following: “The risk of lung cancer is 22 times greater in men who smoke cigarettes and 12 times greater in women smokers in comparison to the non smokers”.

What do these affirmations mean?

In order to face the risk topic in the health environment, it is important to understand the distinction between absolute risk and relative risk. Absolute risk is defined as a risk that a person will get an illness within a certain period of time. Each one of us in fact are at risk of getting various illnesses at some time of our lives. Very often though when communicating the risk factors a relative risk concept is used. This concept determines whether belonging to a particular social category increases or decreases the probability of getting a specific illness. The relative risk concept therefore determines how the risk factor of an individual exposed to a particular risk factor increases compared to an individual which

is not exposed. (This way of presenting a risk is favored in the health campaigns, because it allows people to make comparisons and to incentivize – or at least one hopes – to adopt a healthier lifestyle. It is however important to underline the fact that the relative risk concept could “exaggerate” the probability as a first impression. Indeed if the risk is relative it is very high but the illness nevertheless is a rare one, and therefore the absolute risk is low.)

Going back to our two examples. In the first case we refer to an absolute risk concept, being the risk of dying of lung cancer in the heavy smoker category. While the second case refers to the relative risk concept, being the probability of a smoker getting lung cancer in comparison to a non-smoker.

When we read about health risks it is therefore important to be able to understand what type of risk we are referring to – absolute or relative – in order to establish the actual (objective) risk to our health.



THE CHIKUNGUNYA VIRUS INFECTION. IS IT AN ACTUAL THREAT IN EUROPE? (Francesco Castelli, MD, FRCP (London), FRCM RCPS (Glasgow), University of Brescia)

The Chikungunya virus (CHIKV) is transmitted by Aedes (Aedes aegypti but above all Aedes albopictus, so called “tiger mosquito”) vectors and causes symptoms of fever, often bi-phasic accompanied by painful Arthralgia with a slow resolution (Chikungunya means “that which deforms” in Swahili). The illness normally auto resolves itself, but its complications (meningoencephalitis, CID, etc) can, even if not frequently, lead to death.

This infection has recently been brought to the attention of infectiology and the Public Health operators after the impressive epidemic which struck the islands in the Indian Ocean and the Indian sub-continent in 2006 including more than 1.500.000 people all together and caused hundreds of deaths. Due to the circulation of the correlated micro-organisms and human mobility, after this epidemic, isolated cases appeared also far from the epidemic area, in particular in Europe and also in Italy, leading to the fear of a possible autochthonous transmission (Beltrame et al., 2007) considering the presence of the S.albopictus in our peninsula since the late 90s due to the importing of the larvae in a container of tyres unloaded in Genova.

The prediction materialized in the most shocking manner in Summer 2007, when the fatal arrival of an Indian immigrant infected by the “tiger mosquito” at the viremic phase, in Romagna (Castiglione di Cervia and Castiglione di Ravenna) began the first epidemic of “tropical” fever in a temperate area which had never been noted in literature before (Rezza et al., 2007) with more than 200 cases of the illness.



The international and European surveillance systems, among which the University of Brescia participated with the Italian representatives in Geosentinel (ISTM and CDC), Eurotravnet (ECDC) and Tropneteurop, were immediately activated with passive parallel surveillance, leading to the identification of numerous significant cases in the European continent (Field et al., 2010).

The extension of the diffusion of the tiger mosquito on the French Mediterranean coast led to a further signaling of 2 autochthonous cases in France in the month of September 2010 (ECDC, 2010) making it necessary to carry out cultural training, diagnostic and clinical of the European medical field, and Italian in particular, so as to avoid the adaption of the CHIKV infection in our country, as described by the classic term "Unde venis?" belonging to the medicine of travel.

It is therefore fundamental to remind the population not to create the conditions for the larvae of the tiger mosquito to develop in their homes (stagnant water, flowerpot saucers, dripstones etc.) above all in the spring-summer seasons and to adopt the opportune measures of prevention against the human-vector contact (clothing which covers up, skin repellents, mosquito nets), remembering the fact that the tiger mosquito normally attacks during the day.



GUIDELINES FOR ONLINE COMMUNICATION REGARDING THE CONTROL AND PROMOTION OF HEALTH

(Umberto Gelatti, Director of the Specialization School of Hygiene and Preventative Medicine in the Faculty of Medicine of the University of Brescia.)

As has been well expressed by the authors it is clear by now that *"communication in the health field is part of a 'transversal' area of public communication destined to assume a central and strategic role in the relationship between the government and the citizen. (...) the objective of the website of a public entity is therefore that of offering a telematic platform able to meet efficiently the informative needs, the expectations and the priority of the citizens-patients and to favour their development of in the promotion of health and the prevention of illness, also contributing to an appropriate utilization of the health services (...)*

The methodology used for the preparation of the Guidelines provided both a top-down approach (beginning from the indications by experts, to literature,

to the legislative sector etc.) as well as a bottom-up approach (beginning from the needs and comments of the citizens and the Internet uses to the reconstruction of the actual quality level of the SSN websites).

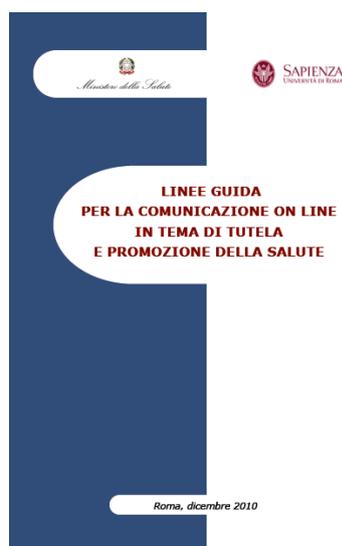
The first part of the Guidelines contains methodology notes and

the description of some data, among which the analysis of the informative needs in the health field and of the efficiency of the interventions undergone online as well as the evaluation of the information in the theme of health offered by the Regions and ASL.

In the second part instead advice and the criteria for online communication in the health field are expressed. In particular advice concerning information content and the type of health care interventions available on Internet, communication strategies and editorial criteria, for the use of dialogue technology and the 2.0 web.

The text of the guidelines can be downloaded from the website

http://www.salute.gov.it/imgs/C_17_pubblicazioni_1473_allegato.pdf





IT AND CRISIS MANAGEMENT: A VERY ACTIVE COMMUNITY (Pietro

Baroni, University of Brescia)

A crisis situation represents an enormous challenge from an appropriate management point of view as well as a rapid flow of information concerning it.

For this reason an international website of researchers was created dedicated to the study and development of an IT system specifically aiming at crisis management.

The non profit association ISCRAM (International Community on Information Systems for Crisis Response and Management), made up of researchers from all over the world has been active since 2004 with various initiatives:

- an annual international conference since 2005;
- a series of summer schools specializing on "the participation of the citizens in the preparation and response to a crisis situation" (2009) and "Management and logistics of humanitarian information: the case of the Haiti earthquake" (2011);
- the distribution of a newsletter;
- the management of specialized forums for the members of the association.

Through these activities the association follows two main objectives:

- promoting research of IT systems for crisis management, referring to the social, technical and practical aspects involved in the use of IT or telematic systems in the management and mitigation of an emergency, disaster and crisis;
- promoting and facilitating the cooperation among researchers, operators, professionals, technical experts and policy makers involved in the management and evaluation of emergencies, disasters and crisis.

Among the themes of the 2011 ISCRAM conference (held in Lisbon, in May) the special session dedicated to "Management of emergencies and the impact on health systems" focusing on two areas which compliment each other, should be highlighted. On one hand the increase in events of a diverse nature has been observed, from terrorist attacks to influenza pandemics up to natural disasters which require an increase in the response capacity of the health units, whilst on the other hand, the growing complexity and articulation of the health units making it more critical to guarantee their continuity in the case of critical situations (the treatment received at home for the frail patients found in a widespread territory).

For further information it is possible to visit the well informed website www.iscram.org



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