



## COMMUNICATION ON SANITARY CRISIS SITUATION: CASE OF PANDEMIC INFLUENZA A/H1N1 (2009)

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### ABSTRACT

This study deals with the theme of communication in a health crisis. It was conducted at the university hospital Ibn Sina in Rabat (CHIS) and was undertaken to describe the communication implemented for the benefit of health professionals before, during and after the crisis of pandemic influenza A/H1N1 (2009). The problem started from a personal irritation and from a statement approved by stakeholders who are sharing the same irritation. The literature review has identified elements describing of the communication during the three phases of the evolution of a crisis on the scale of a pandemic which formed the conceptual framework used to develop different parts descriptive of this work. Data collection was conducted through a questionnaire survey and by semi-structured interviews. Quantitative Analysis of the results obtained clearly showed a lack in communication especially during the pre and post crisis phases. Nevertheless, several communication actions have been deployed by CHIS using even developed technological means (website...) to inform and educate its staff during the pandemic. However, the media were the main source of information for these health professionals. This leads to uncertainty and installation of rumors among them.

**Keywords:** Communication, health crisis, pandemic influenza A/H1N1 (2009), Ibn Sina Hospital

### INTRODUCTION

Communication in a sanitary crisis situation is an essential and intrinsic component of management process and analysis of sanitary crises. It constitutes with social mobility a strategic axis to implement during health crises (WHO, 2004) <sup>[1,2]</sup>.

Pandemic influenza A/H1N1 (2009) represents the first real global health crisis of the 21st century has spared no region of the universe, it did in 284,500 deaths worldwide according to estimates from CDC Atlanta (Reuters, 2012) <sup>[3]</sup>, while the counting made by the WHO reported 18,500 deaths due to laboratory confirmed cases. In Morocco, this pandemic is announced with acuity and statistics report of Moroccan Ministry of Health (MH) as 3057 biologically confirmed cases including 64 deaths and

many thousands of clinical cases (MLED, 2010) <sup>[4]</sup>. To cope, communication has been a major challenge for public health authorities and actors at the operational level. From this was born a personal irritation consolidated findings of resource persons who share the same concern that the results of the informal preliminary interviews have lifted the procedures established for dealing with pandemic influenza A/H1N1 (2009) which have been applied in uncertain situations especially at the beginning of the crisis which resulted by panic, disorientation and difficulty to anticipate the actions to be taken <sup>[5]</sup>. They also showed a deficit in the communication of information. This was due, according to some, to the anxiety provoked by health problem, which comes especially to total ambiguity face to real risk and incomplete knowledge on the pandemic evolution,

which gave way to the quick installation rumors and fears among decision makers and health professionals<sup>[5-8]</sup>. In addition, the processes used to disseminate information to both Professional, stakeholders and populations were not allowed to avoid confusions (Mesbah, Amrani, Derrar and Hannoun, nd).<sup>[9]</sup>

The aims of the present summary and quantitative study is to describe the communication implemented during the pandemic influenza A / (H1N1) 2009 among health professionals and responsables who participated in its management at the CHIS Rabat (hospital of national reference that assumed the first cases and a total of 3785 clinical cases which 656 hospitalizations at the end of the crisis)<sup>[10]</sup>. It particularly targeting the communication between the institution and the health professionals which drive the operating of the latter.

## MATERIALS AND METHODS

The study occurred at the University Hospital Center Ibn Sina of Rabat (CHIS) in Morocco, from 01/11/2011 to 15/07/2012, it touched the three hospitals structures : Hospital Ibn Sina (HIS), Hospital Child Rabat (HCR) and maternity Souissi (MAT Souissi) a total of seven hospitals services (the medical Emergency Hospitallers, the surgical Emergency, the medical Reanimation, the surgical Reanimation, maternity 1, Pediatric 1 and pediatric Reanimation) . The study covered all health professionals contributing to the PEC cases of influenza A/H1N1 (2009) whether 81 persons<sup>[11]</sup>. The method of collecting data used for this population was a questionnaire.

In order to supplement the information collected from the target public, interviews were conducted with five resource persons, who participated in crisis management, selected by reasoned choice. They are members of Crisis cell at each hospital (HIS, HCR, MAT Souissi), well as an administrative responsible at the CHIS direction and responsible at the Emergency Medical Service Help (EMSH).

Concerning data collected treatment; the tools used are those of Epi-info descriptive statistic and Prism Graphpad 5.0, besides the thematic analysis which proved useful for treatment of conducted interviews.

## RESULTS AND DISCUSSION

The description of Communication in a sanitary crisis situation among health professionals at the CHIS Rabat will be treated according to the three phases that determinate the health crisis<sup>[8&12]</sup>, namely before, during and after the crisis.

The exhaustive sampling has allowed to respect the representativeness of all actors involved at the site of study that targeted a sample of 81 health professionals, whether participation rate 92% (74 respondents to the study) and it is 100% for interviews.

The nursing profile is predominant in the study population by counting the proportion of 89.2% (of which 92% are IDE) against a percentage of 10.8% for the profile of doctors. This is explained by the departure of nearly all doctor residents and internal of services concerned by the study. Only associate professors and specialists have participated. The sex distribution is identical and the predominant age class ranges between (40,50) years.

In terms of professional practice seniority of target population, 5 years as minimum confirms that the sample is effectively part of the inclusion criteria in the study.

**Before the crisis:** The majority of health professionals concerned by this study have confirmed that they haven't received formations about communication on sanitary crisis, while the existence of such culture may well lead management of the latter, as noted Ben Dhia (nd)<sup>[13]</sup>. In addition, nearly 69% of population of the study confirmed that they had participated in any formations session on pandemic influenza whether before or after the crisis, this finding diverges with answers of responsible who confirm that all first-line actors have received formations.

The results concerning the formation of health professionals of CHIS have shown that it concerned only 31% of sample. This finding correlates with the certificate of professional competence CPC study of MH<sup>[5]</sup> where the group focus, the professionals of strategic and regional level, noted that they had judged the knowledge of influenza A/H1N1 (2009) as insufficient.

**During the crisis:** Further, the most information source used by health professionals retained is the media whatsoever before or during the crisis, the results are respectively 67.60% and 61%. This finding converges with the results obtained from the interviewed responsible who noted that it is the media who have occupied important place in information about influenza A / H1N1 (2009). This result is explained in a French study conducted on the population, of which 73% presume that journalists were too spoken on the subject and that the crisis was widely mediatised (CNRS, 2007)<sup>[14]</sup>.

The services notes are listed the most means used internally by the CHIS for sharing information

according to health professionals, despite the investment of CHIS in NTIC as website, services information, the intranet generalization and internet, etc. <sup>[11]</sup>. This is noticed also on the under-utilization of the MH website (35%) by health professionals to research the information.

In terms of the crisis cell constituted in the CHIS, it is remarkable the absence of the Committee for the Fight against nosocomial infections (CLIN) representative, while it may bring more especially to fight against nosocomial infections in such a pandemic where the preparations are worn much more on the hygiene and highly contagious <sup>[15]</sup> of the virus of influenza A / H1N1 (2009).

**After the crisis:** The end of the crisis has been a moment of relief from the CHIS responsables interviewed who says they have not prepared anything for communication in favor of health professionals, this is confirmed by the questionnaires raised in the 58% that stopping of communication has been brutal after the crisis. With regard to the realization of meetings evaluation of the crisis communication <sup>[16]</sup> by health professionals, 70% highlighted the absence of these meetings in their services and only 19% confirmed that there had evaluation of meetings at the CHIS among which 33% have raised their participations in these meetings. Briefly, the post-crisis communication of influenza A /H1N1 (2009), the measures undertaken by CHIS organization were minimal, which corresponds to the Libaert's findings (1998) <sup>[8]</sup> that raise this phase is typically denied.

This study is characterized by its originality, because it seems to be the first to have attempted to describe the communication in sanitary crisis situation in Morocco hospital structure, in addition, the nature of the sample which affected all of the target population. Also, we have benefited from the collaboration of DECD responsible and the division of

communication of the MH. However, we were confronted with the rarity of writings, national and international empirical studies, in addition the characteristic of the retrospective study didn't reaching all the people concerned by the study, especially for the medical personnel in which the sample was very restricted because almost of doctors (residents and interns) who were involved in the crisis management of influenza A / H1N1 (2009) are not working in the services concerned by the study.

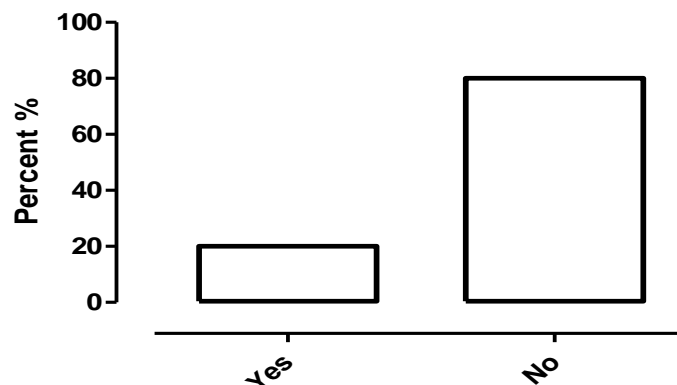
## CONCLUSION

Well conducted, crisis communication permit to control the risk related to crisis, to absorb and prevent rumors which disrupt any action to be taken to deal with crisis, identify the problem and maintain the confidence of actors in order to ensure their contribution and implication in the management and obviously a good mastery of the problem situation.

Its success is strongly linked to a prior preparation of the communication via planning that determines the suitable objectives for crisis situations and evaluation of the attainment of these.

At the end of our study, it seems clear that the communication displayed by the CHIS Rabat about sanitary crisis situation related to pandemic influenza A /H1N1 (2009) in favor of health professionals has been limited in terms of preparation, its implementation and evaluation.

This induces the need for effective action that will allow the development of management culture and organization of information concerning health crises in the CHIS and generally in other hospital structures. Finally, communication in general and particularly crisis communication should aim to develop a sense of belonging professional health institutions and foster a climate of confidence and a culture of participation and partnership.



**Figure 1:** Distribution of the population by participation in simulation exercises

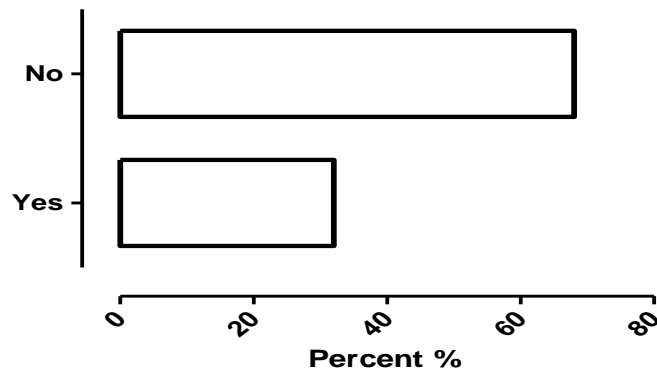


Figure 2: Staff information on the communication strategy adopted by the CHIS

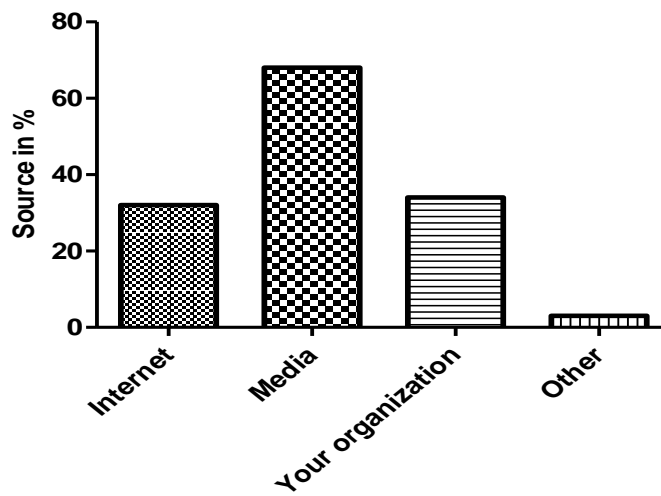


Figure 3: The Information Source on Influenza A / H1N1 for healthcare professionals before the crisis

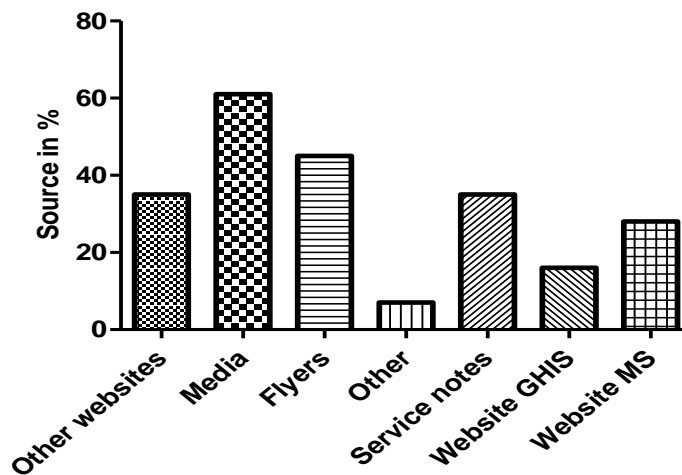


Figure 4: The methods used to share information during the crisis in the organization

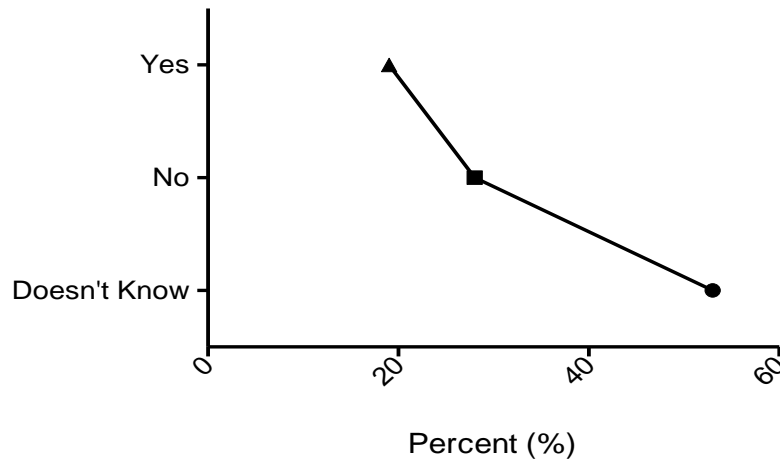


Figure 5: The evaluation of the communication activity in the GHIS

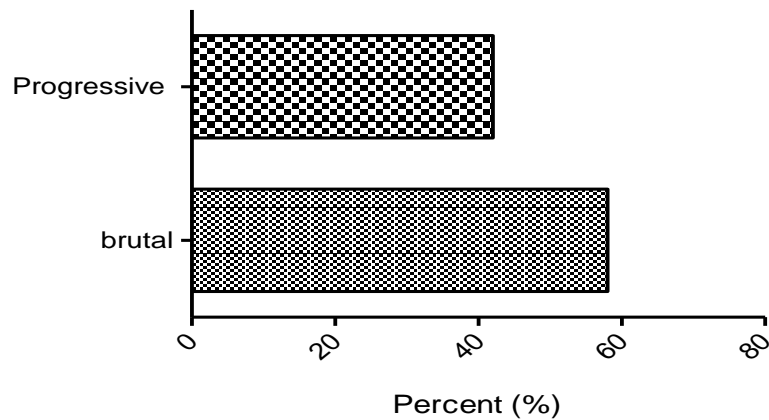


Figure 6: The judgment of the communication after the crisis

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