

THE IMPACT AND THE UNDERSTANDING OF SWINE FLU IN BIHOR COUNTRY

Chereji Anca

University of Oradea, Faculty of Environmental Protection, 26 Gen. Magheru St., Oradea
E-mail: cij_anca@yahoo.com

Abstract

The 2009 flu pandemic was an outbreak of a new strain of H1N1 influenza virus, usually referred to as "swine flu". The virus appeared to be a new strain of H1N1 which resulted when a previous triple reassortment of bird, swine and human flu viruses further combined with a Eurasian pig flu virus. The outbreak began in the state of Veracruz, Mexico, with evidence that there had been an ongoing epidemic for months before it was officially recognized as such. The rapid expansion of viral infection has imposed various attitudes and recommendations coming from the competent authorities in the field of public health, such as the World Health Organization.

Key words: swine flu, A(H1N1), pandemy, prevention

INTRODUCTION

Swine flu is a respiratory disease caused by viruses that infect the respiratory tract of pigs and result in nasal secretions, a barking-like cough, decreased appetite, and listless behavior. Swine flu virus was first isolated from pigs in 1930 in the U.S. and has been recognized by pork producers and veterinarians to cause infections in pigs worldwide. In a number of instances, people have developed the swine flu infection when they are closely associated with pigs (for example, farmers, pork processors), and likewise, pig populations have occasionally been infected with the human flu infection.

Many researchers now consider that two main series of events can lead to swine flu becoming a major cause for influenza illness in humans.

First, the influenza viruses (types A, B, C) are enveloped RNA viruses with a segmented genome; this means the viral RNA genetic code is not a single strand of RNA but exists as eight different RNA segments in the influenza viruses. A human influenza virus can infect a pig respiratory cell at the same time as a swine influenza virus; some of the replicating RNA strands from the human virus can get mistakenly enclosed inside the enveloped swine influenza virus.

Second, pigs can play a unique role as an intermediary host to new flu types because pig respiratory cells can be infected directly with bird, human and other mammalian flu viruses. Consequently, pig respiratory cells are able to be infected with many types of flu and can function as a "mixing pot" for flu RNA segments

MATERIALS AND METHODS

To conduct this study, I accessed the database of the World Health Organization, of the Ministry of Health and, also, information arising from the Bihor Public Health Department.

For full understanding of the pandemic process triggered by swine flu, I considered that it is necessary to evaluate the knowledge that the general population has towards this pathology. It was monitored the applicability of prevention program for A(H1N1) infection compared with the availability of people to be properly informed.

So, there were questioned 200 people, older than 18, from urban environment, on what they understand by the swine flu. The results were presented in the form of graphs and tables.

RESULTS

By April 28 2009, several countries have confirmed cases of influenza A(H1N1). General information on the influenza A(H1N1) have been posted on the WHO website. On June 11, 2009, The World Health Organization (WHO) declares global H1N1 flu pandemic and one year later, on August 10, 2010, WHO declares an end to the global H1N1 flu pandemic.

The first case of A (H1N1) flu was confirmed in Romania on May 27, 2009 at a 30-year-old woman who came from New York on May 23 after he made a stopover in Paris.

The total number of infections in Romania in 2009-2010 was 7008 cases; from witch 122 patients had deceased. (Fig.1.)

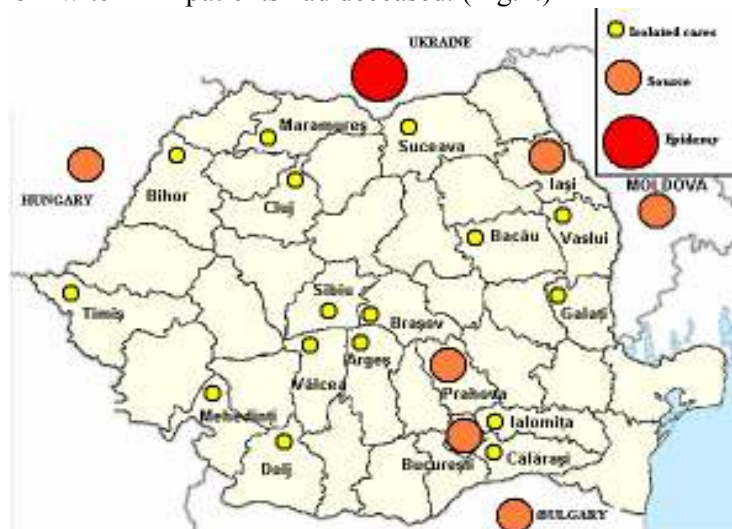


Fig. 1. Incidence of swine flu in Romania (November 2 2009)

(Source: <http://www.riscograma.ro/1130/gripa-porcina-harta-imbolnavirilor-in-romania>)

Until October 29 2009, in Bihor County there were confirmed two cases of new (swine) flu A(H1N1), both as a result of travel abroad. Contacts of the two cases were identified and were ordered strict isolation measures at home under medical supervision. (Table 1.)

Public Health Department of Bihor County submitted until the end of October 2009, links to family physicians, doctors in schools and health facilities with beds about the measures ordered by the Ministry of Health.

All those units must notify the Public Health Department about the epidemiological events with the potential for pandemic flu. In schools, doctors should continue to conduct rigorous epidemiologic triage of the community concerned, but also to promote proper hand washing whenever necessary. There was established a complex program of informing people about the swine flu and the possibilities of prophylaxis.

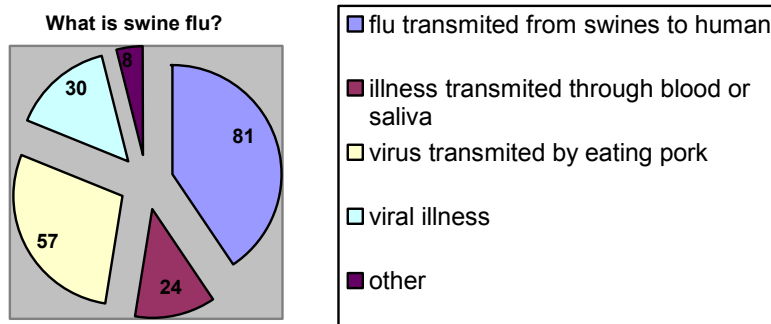
Application of information and prevention program run by the Ministry of Health and mediated by the Public Health Department, placed Bihor County among the areas with a low incidence of infection with swine influenza compared to the situation in the whole country.

Table 1.

Total number of confirmed cases in Bihor County		
	Datum	Number of cases
1.	26.10.2009	1
2.	07.11.1009	2
3.	16.11.2009	1
4.	17.11.2009	2
5.	18.11.2009	3
6.	27.11.2009	2
7.	03.12.2009	2
8.	14.12.2009	1
9.	22.12.2009	1
10.	4.01.2010	2
11.	8.01.2010	2
12.	10.03.2010	1
	Total	20 cases

The information must have a receiver willing to accept and understand the data provided by competent authorities or doctors.

Analyzing the responses given by 200 people, older than 18 years, living in Oradea, it was obvious that all of them have heard about swine flu, but just a few of them really understand what it is and witch is the flu's way of action.



Only 111 (55.5%) of the respondents gave satisfactory answers, their conception had tangency with reality. Half of them do not know what swine flu is, so they can not understand how it is transmitted or how it can be prevented.

CONCLUSIONS

The swine flu triggered a pandemy whose effects were felt in our country, including Bihor County.

Health authorities have resorted to measures to limit the spread of pathological phenomenon, but prevention is primarily dependent on how it approaches people.

Successful prevention requires simple knowledge, but accurate about the pathological phenomenon, but unfortunately, many people (almost 50% of the questioned ones) have no minimum basic knowledge.

Without fully understanding the pathology can not apply the rules of prevention.

REFERENCES:

1. Hampson A.W., J.S. Mackenzie, 2006, The influenza viruses, The Medical Journal of Australia 185 (10 Suppl): S39–43.
2. Hellerman C., 2009, "Swine flu 'not stoppable', WHO says". CNN.com.
3. McNeil Jr., G. Donald, 2009, In New Theory, Swine Flu Started in Asia, Not Mexico. The New York Times <http://www.cnn.com/2009/HEALTH/06/11/swine.flu.who/>.
4. Trifonov V., H. Khiabani, R. Rabadan, 2009, Geographic Dependence, Surveillance, and Origins of the 2009 Influenza A (H1N1) Virus, New England Journal of Medicine 61 (2): 115–119.
5. Van Reeth K., 2007, Avian and swine influenza viruses: our current understanding of the zoonotic risk, Veterinary Research 38 (2): 243–60.
6. <http://gripa-porcina.net/>
7. <http://www.aspbihor.ro/>
8. http://www.medicinenet.com/swine_flu/article.htm
9. <http://www.ms.gov.ro/>
10. <http://www.riscograma.ro/1130/gripa-porcina-harta-imbolnavirilor-in-romania/>