Distorted Alarms: The Epidemic Narrative and the Media Story—The 2009-10 Swine Flu in the Portuguese News

Gonçalo Pereira Rosa

Portuguese Catholic University, Lisbon, Portugal

In April 2009, a new strain of influenza subtype H1N1 emerged due to the rearrangement of two RNA segments. The strain incorporated two segments of the genome of porcine origin and was officially designated as A/California/4/2009/H1N1. In June 2009, alarmed by the infection's progress, the World Health Organization (WHO) declared the "level six" of the geographical progression scale for epidemics and kept it at that level until August of the following year. The Portuguese media activated the public health alarm and integrated it into its agenda, but the volume and severity indicators of the news coverage did not correspond to the epidemiological indicators of progression. This paper describes how two narratives with different rhythms for the swine flu pandemic *de facto* emerged.

Keywords: risk society, expertise, news making, news-values, health risks

On April 24, 2009, after receiving the results of tests performed by a Canadian laboratory, the WHO announced the identification of eight suspected cases of a new flu strain in Mexico and seven in the United States. Since March the North American media divulged frightening evidence of the progression of a lung disease in Mexico, with unidentified causes and similar initial symptoms to those of the seasonal flu.

Although it is difficult to trace the outbreak to the source, it has been argued (Cervantes et al., 2009) that the emergence of three dozen cases of respiratory diseases in the village of La Gloria, in the south-eastern Mexican state of Veracruz and near pig facilities, is the most probable source for the so-called "patient-zero".

The rapid progression of infection in the Mexican territory and the lack of basic knowledge of morbidity and mortality rates of the virus, as well as the risk factors of this particular strain, contributed to the significant alarm within WHO. Although influenza pandemics were not unprecedented—there were at least four in the last 120 years (in 1889, 1918-19, 1957, and 1968, according to Nerlich et al., 2007), the speed of contact between human communities was now a new factor for spreading the contagion. As Ungar (2008) pointed out about the outbreak of Ebola in the Democratic Republic of Congo, though new epidemics can erupt in remote destinations, they are now easily spreadable via a plane trip.

Analyzing the media coverage of the swine flu pandemic in Britain, Harding (2009) concluded that there were several igniter factors likely to alarm the Western media to the severity of this health problem. The account of deaths allegedly caused by the strain in Mexico between March and April 2009 was certainly one of those factors. Early reports revealed more than six dozen deaths, although Mexican laboratories had no technology to effectively track the deaths caused by the virus.

Gonçalo Pereira Rosa, doctorate researcher, Centre for Studies of Communication and Culture, Portuguese Catholic University.

The degree of alarm among WHO and other international health authorities responsible for issuing daily bulletins on updated contagions was a significant indicator of severity, as they clearly conveyed a sense of urgency to the problem.

The profile of the H1N1 virus infection, detected in younger patients, contrary to what generally occurs with the seasonal flu, was also cause for suspicion, particularly because it broke one of the patterns of seasonal flu, multiplying even in the hottest months of the year. Harding (2009) also considered that the alarm rose by 2004-05 avian flu contributed to the construction of a perception that the next epidemic had the potential to be catastrophic, providing a plausible context for a pre-existing frame.

The absence of specialized knowledge and routines in most newsrooms regarding the processes for progression of epidemics should be noted. For many journalists, there were no reliable relationships with the most credible sources in this specialized field of virology, meaning that the fundamental concepts of epidemiology were unknown. As noted a daily newspaper journalist interviewed by the author for this project, many in the media had no frame of reference for the new social problem:

> I was unaware of information on the levels of progression and alarm. Although I write a lot about health, I focus more on issues of national health policy. I was not so comfortable with this problem. Incidentally, my own newspaper initially packed up the subject in the international pages, as a problem unfolding in the outside world. (Author's interview with a daily newspaper journalist)

The investment in the subject by an important group of expert sources, with high symbolic power and influence on policy makers (Lopes et al., 2010), as well as their unanimity in acknowledging the threat, also provided encouraging signs for the media to accept the dominant frame and disseminate it in its first reports.

The project was inspired by Murdock's premise (Murdock et al, 2003), according to which the study of journalistic production of risk events requires a complex analysis matrix, not limited to measure the evolution of the journalistic story, but crossing it instead with layers of indicators produced by the expert field.

The Modern Disease

Western societies have evolved in the second half of the 20th century from a paradigm marked by infectious disease to a new model, under which the main cause of death is now chronic or degenerative disease (Lupton; 2003; Cabral et al., 2002). The relationship between society and disease reflects new assumptions to the extent that indicators of health, wellbeing, and life expectancy have seen significant improvements and access to health care has become widespread. Premature death from illness or accident is socially constructed as the breaking of the system, suggesting the need to trace causes and culprits to prevent new instances (Link & Phelan, 1995).

The public debate on health itself reflects this new circumstance, evolving from the complaint of poor health or detection of contagious outbreak conditions, typical of pre-modernity, to discourses on the health system, its strengths and weaknesses, the unequal access to care and, recently, on the signs of system degradation (Lupton, 2003; Silva, 2011). In this paradigm, disease in the media is now built more often in aggressive perspectives, assigning the system user to the need of taking care of his or her welfare (Foucault, 1979). Therefore, a pattern of patient-expected attitudes and health behaviors is created, distinguishing abiding bodies from permissive bodies—those that allow the disease to progress and hence should temporarily abdicate from their own body jurisdiction (Foucault, 1979).

In journalistic representation, many modern diseases bear the stigma of accountability, blaming the patient

for not taking proper care by failing to secure his or her well-being, for being indulgent in food or ingested drugs, for physical inactivity or, in the case of sexually transmitted diseases, for having indulged in promiscuous or risky behaviors (Lupton, 2003).

In this context, strongly emphasized by the media and by a wide range of publications and television programs, a flu epidemic brings back to the public space the paradigm of infectious disease and the spread of disease, regardless of a social agent's behavior. Without known risk factors, the invisible virus circulates without revealing its presence, infecting all ages and social groups alike, and quickly becomes the object of discourse. The prevailing discourse about the flu epidemic constructs the virus as the enemy to be killed. Indeed, news coverage about the pandemic largely followed this frame.

Distortion Between News and the Expert Voices

There is a vast body of literature on the journalistic representation of events marked by strong scientific controversy and without a clear outcome on the horizon (Eldridge et al., 2003; Gonçalves et al., 2007). However, there is no model for media's actions in a scientific controversy, as there are too many variables that affect the final outcome.

In Portugal, Gonçalves (2001) documented how the public debate on the construction of a dam on the River Coa in the 1990's was marked by strong investment in journalistic frames proposed by the proponents of the protection of local rock art sites, affecting the controversy's outcome. However, in an almost identical historical context, the same author (Gonçalves, 2003) noted that the debate over the location of an incineration waste facility was affected by the polarization of scientific advice. In this second case, the two fields in dispute used validated technical and scientific expertise, hence dividing the journalistic intermediation and complicating the debate. In other disputes, such as for instance the discursive battle over an oil spill (Anderson, 2002:8), the media overcomes the ambiguity between sources with a high symbolic capital by building a group as "authorities" (typically, the governmental sources) and the others as "pretenders".

In the world risk society (Beck, 1999), marked by strong uncertainty and frequent emergence of disruptive events that jeopardize the technical-scientific guarantees, conflicts within the scientific field tend to multiply, fragmenting the authority of expertise and posing new challenges to journalistic practice.[1]

Project and Methodology

The author argues in this article that health indicators of disease progression, infection, hospital admissions, and deaths can measure the evolution of swine flu pandemics in Portugal between 2009 and 2010. Those are the expert indicators that allowed health officials to estimate the severity of alarm as the epidemic progressed. They constitute what the author called the "epidemiological narrative".

The author further argues that the peak severity of each of these health indicators did not chronologically correspond to the peaks of journalistic activity, inferred from indicators such as the number of stories on the subject or the topic emphasis on newspaper covers or television opening news. These indicators were the journalistic narrative that the author contrasted with the epidemiological one.

The author used official bulletins from the Directorate General of Health (DGH, 2010) about the problem, which contained weekly indicators of infection, hospitalizations, and deaths. In this pandemic, for the first time,

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[1] An exception to this may be climate change, where the vast majority of scientific authorities are in agreement, leaving the small community of climate change deniers framed not as "pretenders" but rather as willfully resistant to evidence.

health officials devoted huge resources to the compilation and provision of statistical information, allowing reporters to include validated, reliable information in their stories.

From April to June 2009, information was released daily and all cases of infection were confirmed by laboratory analysis. After the summer, these reports became weekly as health authorities no longer had the capacity to confirm all suspected cases of H1N1 infection. The weekly reports informed the media of flu-like symptoms, e.g., the number of individuals who resorted to health facilities with flu-associated symptoms, and the number of hospital admissions. From September 2009 to January 2010, DGH also included weekly information on deaths associated with swine flu in Portugal. This unprecedented effort standardized media coverage and allowed an a posteriori long-term analysis, enhanced by the first epidemiological assessment of the disease on national territory (Froes et al., 2010).

The first death occurred on September 23, 2009 and the last on March 3, 2010. In Portugal, the first confirmed infection was diagnosed on April 29, in a woman who had travelled to Mexico. The second occurred only on 31 May and the third on June 12. Many others followed until the first secondary case (diagnosis of an infected patient after the first generation of an incubation period), on the 4th of July. Then came the first cluster in a Lisbon kindergarten the next day (generated by initial five cases associated with a child who had been in Mexico). On 10 July, the first case was identified with no epidemiological history (e.g., impossible to determine where and how the contamination occurred). On 18 August, the number of patients with no epidemiological history surpassed for the first time the number of imported cases and secondary cases (DGH, 2010).

In the journalistic narrative, within a broader project (Rosa, 2013), the author selected three primary sources: the print edition of a prestigious daily newspaper ("Público"), the electronic edition of a popular newspaper ("24 Horas") and the eight o'clock news program of public television ("RTP"). The author screened all the journalistic materials containing the previously defined words ("flu", "epidemic", "pandemic", "virus") from April 21, 2009, the day of the first story broke out, to the end of April 2010, when DGH stopped its swine flu bulletins.

In the study design, an item was any autonomous newspaper or newscast space, any illustration, textbox or headline, created as an independent unit (Silveira et al., 2010) from these three primary journalism sources. In the newspapers, the author also coded all headlines or verbal titles visually related to the topic, assuming, as Van Dijk (1988) did, that they express "the top of the semantic macrostructure, program(ming) the process of interpretation and provid(ing), a (subjective) definition of the situation" (p. 173).

The author argued that the same role could be attributed to the opening news in the television newscast. Besides the number of daily items produced by each media outlet and the number of headlines devoted to the case, he has also considered as indicators of journalistic relevance the references to swine flu on the first page of the sampled newspapers. This indicator had no equivalent on television.

The purpose of this study was to find clues about the variations between the journalistic and the epidemiological narratives. To this end, the author established significant time landmarks for this event, like the formal declaration of the pandemic (week 24 of 2009); the first death in Portugal (week 39); the death of a 10 years old boy, the most dramatic incident during the coverage (week 44); the week of a false alarm accidentally generated by three foetal deaths in utero of vaccinated pregnant women (week 47); and the week with the most deaths in the country (week 49).

In the project, the author also interviewed two journalists, one from a daily newspaper and the other from

the television information division, and he interviewed two crisis managers for the operative group constituted by the Ministry of Health to stop the pandemic. Accepting Mathison's triangulation of methodologies (Mathison, 1988), the author aimed at reducing the researcher's interference in the analysis, allowing each respondent to account for his or her particular perspective and revealing the unsaid in the news text.

Results

The quantitative indicators of news coverage should be interpreted with caution, but it seems undeniable that the swine flu coverage was high in the sampled media. The author detected 746 items in "Público", 356 in "24 Horas" and 443 in "RTP" (see Table 1). The flu was a cover story on 66 occasions (18 as headline) in the first of these newspapers and in 42 days in the second (with only three headlines). In the newscast, it was the opening story in 30 different occasions and it ranked among the top ten daily news items in 255 days.

Table 1
Items, Headlines, or Television Opening News and First Page References in Both Newspapers

Week	Items	Frequency	Headlines	Frequency	First page	Frequency
17 (20/04-26/04)	11	0.71	2	3.92	1	0.92
18 (27/04-03/05)	109	7.055	5	9.80	8	7.40
19 (04/05-10/05)	90	5.82	2	3.92	10	9.25
20 (11/05-17/05)	18	1.16	0	0	2	1.85
21 (18/05-24/05)	22	1.42	0	0	1	0.92
22 (25/05-31/05)	6	0.38	0	0	0	0
23 (01/06-07/06)	12	0.77	0	0	2	1.85
24 (08/06-14/06)	20	1.29	2	3.92	2	1.85
25 (15/06-21/06)	27	1.74	0	0	1	0.92
26 (22/06-28/06)	10	0.64	1	1.96	0	0
27 (29/06-05/07)	29	1.87	2	3.92	2	1.85
28 (06/07-12/07)	92	5.95	9	17.64	9	8.33
29 (13/07-19/07)	59	3.81	4	7.84	4	3.70
30 (20/07-26/07)	60	3.88	1	1.96	4	3.70
31 (27/07-02/08)	52	3.36	1	1.96	2	1.85
32 (03/08-09/08)	48	3.10	2	3.92	5	4.62
33 (10/08-16/08)	96	6.21	4	7.84	7	6.48
34 (17/08-23/08)	50	3.23	2	3.92	3	2.77
35 (24/08-30/08)	39	2.52	2	3.92	1	0.92
36 (31/08-06/09)	34	2.20	2	3.92	2	1.85
37 (07/09-13/09)	32	2.07	1	1.96	2	1.85
38 (14/09-20/09)	28	1.81	0	0	3	2.77
39 (21/09-27/09)	46	2.97	3	5.88	5	4.62
40 (28/09-04/10)	28	1.81	0	0	1	0.92
41 (05/10-11/10)	22	1.42	0	0	1	0.92
42 (12/10-18/10)	16	1.03	0	0	1	0.92
43 (19/10-25/10)	33	2.13	1	1.96	1	0.92
44 (26/10-01/11)	104	6.73	3	5.88	9	8.33
45 (02/11-08/11)	56	3.62	2	3.92	3	2.77
46 (09/11-15/11)	37	2.39	0	0	1	0.92
47 (16/11-22/11)	77	4.98	0	0	6	5.55

48 (23/11-29/11)	50	3.23	0	0	4	3.70
49 (30/11-06/12)	23	1.48	0	0	1	0.92
50 (07/12-13/12)	18	1.16	0	0	1	0.92
51 (14/12-20/12)	11	0.71	0	0	0	0
52 (21/12-27/12)	11	0.71	0	0	1	0.92
53 (28/12-03/1)	7	0.45	0	0	0	0
1 (4/01-10/01)	11	0.71	0	0	0	0
2 (11/01-17/01)	4	0.25	0	0	0	0
3 (18/01-24/01)	3	0.19	0	0	0	0
4 (25/01-31/01)	17	1.10	0	0	1	0.92
5 (01/02-07/02)	9	0.58	0	0	1	0.92
6 (08/02-14/02)	5	0.32	0	0	0	0
7 (15/02-21/02)	6	0.38	0	0	0	0
8 (22/02-28/02)	2	0.12	0	0	0	0
9 (01/03-07/03)	1	0.06	0	0	0	0
10 (08/03-14/03)	0	0	0	0	0	0
11 (15/03-21/03)	0	0	0	0	0	0
12 (22/03-28/03)	4	0.25	0	0	0	0
13 (29/03-04/04)	0	0	0	0	0	0
Totals	**1,545**	**100%**	**51**	**100%**	**108**	**100%**

Note. Total cumulative percentages were rounded to 100%.

Focusing on the three indicators of journalistic attention, the author found that the first critical period occurred at weeks 18 and 19 of 2009, corresponding to the last week of April and the first of May. This coincided with the public identification of a new health issue quickly seen as alarming, given the information that came from Mexico and WHO. In fact, week 18 saw the biggest volume of journalistic items about swine flu of the entire sample (109). A week later the subject reached the peak of first page coverage on both newspapers (10).

The second peak of journalistic intensity was produced in week 28, a period with the highest number of headlines and television openers (9). The discussion then included the first items of government planning for the acquisition and management of future vaccine against the virus.

A new increment in journalistic production was found in week 33, with a high volume of news items (96) and headlines (4). Journalistic attention was then driven to the capacity of health services in the South of Portugal to deal with the anticipated increase of hospital calls.

A last clear peak in journalistic attention was detected in week 44 (the final week of October). In the ranking of news-production, it was the second highest in published items (104) and first page references (9). By then, flu-related deaths had already begun and the country was shocked with the news of the death of a 10 years-old child after a short hospitalization. Significantly, the same day, another patient died in the Azores. But as he fell within the expected age group of a swine flu victim and since his death took place in a territory outside the main journalistic territorial networks (Tuchman, 1978), the event had slight prominence.

Table 2 refers to the epidemiological narrative and reveals different patterns.

Table 2

Epidemiological Indicators (Lab Confirmed Infections, Flu-like Symptoms, Hospitalizations, and Deaths)

Week	Cases	Frequency	Symptoms	Frequency	Hospitalizations	Frequency	Deaths	Frequency
17 (20/04-26/04)	0	0	N/A	N/A	0	0	0	0
18 (27/04-03/05)	1	0.04	N/A	N/A	0	0	0	0
19 (04/05-10/05)	0	0	N/A	N/A	0	0	0	0
20 (11/05-17/05)	0	0	N/A	N/A	0	0	0	0
21 (18/05-24/05)	0	0	N/A	N/A	0	0	0	0
22 (25/05-31/05)	1	0.04	N/A	N/A	0	0	0	0
23 (01/06-07/06)	0	0	N/A	N/A	0	0	0	0
24 (08/06-14/06)	1	0.04	N/A	N/A	0	0	0	0
25 (15/06-21/06)	3	0.13	N/A	N/A	0	0	0	0
26 (22/06-28/06)	5	0.22	N/A	N/A	0	0	0	0
27 (29/06-05/07)	33	1.47	N/A	N/A	0	0	0	0
28 (06/07-12/07)	53	2.36	N/A	N/A	0	0	0	0
29 (13/07-19/07)	54	2.40	N/A	N/A	0	0	0	0
30 (20/07-26/07)	92	4.09	N/A	N/A	0	0	0	0
31 (27/07-02/08)	88	3.92	N/A	N/A	0	0	0	0
32 (03/08-09/08)	234	10.42	N/A	N/A	0	0	0	0
33 (10/08-16/08)	740	32.97	N/A	N/A	0	0	0	0
34 (17/08-23/08)	950	42.33	N/A	N/A	0	0	0	0
35 (24/08-30/08)	N/A	N/A	2,879	1.49	3	0.20	0	0
36 (31/08-06/09)	N/A	N/A	2,390	1.24	13	0.90	0	0
37 (07/09-13/09)	N/A	N/A	2,105	1.09	19	1.32	0	0
38 (14/09-20/09)	N/A	N/A	2,213	1.15	20	1.39	0	0
39 (21/09-27/09)	N/A	N/A	1,530	0.79	21	1.46	2	1.61
40 (28/09-04/10)	N/A	N/A	1,772	0.92	15	1.04	0	0
41 (05/10-11/10)	N/A	N/A	2,476	1.28	20	1.39	1	0.80
42 (12/10-18/10)	N/A	N/A	3,044	1.58	15	1.04	1	0.80
43 (19/10-25/10)	N/A	N/A	4,732	2.46	47	3.26	0	0
44 (26/10-01/11)	N/A	N/A	7,110	3.69	63	4.38	2	1.61
45 (02/11-08/11)	N/A	N/A	14,111	7.33	121	8.41	1	0.80
46 (09/11-15/11)	N/A	N/A	19,903	10.35	164	11.40	3	2.41
47 (16/11-22/11)	N/A	N/A	27,121	14.10	148	10.29	9	7.25
48 (23/11-29/11)	N/A	N/A	27,169	14.12	149	10.36	8	6.45
49 (30/11-06/12)	N/A	N/A	20,506	10.66	127	8.83	18	14.51
50 (07/12-13/12)	N/A	N/A	14,518	7.54	133	9.24	15	12.09
51 (14/12-20/12)	N/A	N/A	10,221	5.31	95	6.60	13	10.48
52 (21/12-27/12)	N/A	N/A	6,419	3.33	58	4.03	9	7.25
53 (28/12-03/12)	N/A	N/A	4,811	2.50	73	5.07	9	7.25
1 (4/01-10/01)	N/A	N/A	4,558	2.37	39	2.71	10	8.06
2 (11/01-17/01)	N/A	N/A	3,451	1.79	34	2.36	9	7.25
3 (18/01-24/01)	N/A	N/A	2,986	1.55	17	1.18	5	4.03
4 (25/01-31/01)	N/A	N/A	2,517	1.30	22	1.52	3	2.41
5 (01/02-07/02)	N/A	N/A	2,046	1.06	12	0.83	4	3.22
6 (08/02-14/02)	N/A	N/A	1,706	0.88	10	0.69	1	0.80
7 (15/02-21/02)	N/A	N/A	0	0	N/A	N/A	0	0
8 (22/02-28/02)	N/A	N/A	0	0	N/A	N/A	1	0.80
9 (01/03-07/03)	N/A	N/A	0	0	N/A	N/A	0	0

10 (08/03-14/03)	N/A	N/A	0	0	N/A	N/A	0	0
11 (15/03-21/03)	N/A	N/A	0	0	N/A	N/A	0	0
12 (22/03-28/03)	N/A	N/A	0	0	N/A	N/A	0	0
13 (29/03-04/04)	N/A	N/A	0	0	N/A	N/A	0	0
Totals	**2,244**	**100%**	**192,294**	**100%**	**1,438**	**100%**	**124**	**100%**

Note. Total cumulative percentages were rounded to 100%. Source: Clinical Bulletin of the DGH (2009/10); Froes et al., (2010).

Of the four selected indicators (confirmed infections, flu-like symptoms, hospital admissions, and deaths), it is worth noting that the timeframe of the first one was quite different from the others, since this clinical procedure was only recorded up to week 34. The data demonstrates that the epidemiological problem significantly worsened from week 32, during which the contagion always exceeded 200 people per week. The following week, the contagion almost tripled and reached its highest value at week 34, which corresponded to 42% of all swine flu cases reported since April.

Remaining indicators reveal a more uniform peak severity. It becomes evident that the flu-like symptoms and the corresponding hospital admissions worsened significantly from week 46 and continued until the end of November 2009. The peaks occurred in week 48 (flu like symptoms) and 46 (admissions). From mid-November, the deaths also increased steadily, albeit with a slight lag compared to previous indicators. The most severe weeks, with more than ten deaths per week, were weeks 49, 50, and 51 of 2009 and the first week of 2010.

The overlapping of these data layers (see Figure 1) suggests that the clinical and journalistic narratives did not chronologically correspond because the media seemed to have reached the kairos moment (Rebelo, 2006) or saturation point by the end of November. Yet, this was three weeks prior to the epidemic's actual peak.

As Ramonet (1999: 37-45) had already foreseen for other events, television reached it more quickly than the print media, forcing the remaining medium to define themselves in relation to their agenda. Thus, from week 48 on, the television information service did not again produce more than 50 weekly journalistic items about the flu.

Discussion

It seems clear that the first peak of journalistic activity coincided with the boost provided by validated, reliable scientific sources with high symbolic capital, such as the WHO, the DGH, and the Ministry of Health. Journalists attributed relevance and alarm to the stress signals provided by these official sources, amplifying the risk, its threats and highlighting preventive care. It should be noted, as it has been stressed by the author's interviews (Rosa, 2013), that strong unanimity among international media was also a motivating factor. Finally, the unusual frequency of health bulletins (daily until June) and the use of the minister as a spokeswoman in these sessions, regularly scheduled for the afternoon of each day, also functioned as signals of newsworthiness.

Reporters confided that, by early summer, they already felt that the topic was not progressing as feared. Nevertheless, the journalistic narrative still stressed the responsiveness of health units, companies, and schools to face the expected surge of sick people. By July, however, despite the first harmless cases of confirmed infection, the original frame was still predominant, though fed with complementary frames. As Conrad (2001) had found about the representation of mental illness in the media, despite relevant data to the contrary, news organizations often persisted with their original frames. In this case, journalists continued to present the flu as progressing according to early predictions.
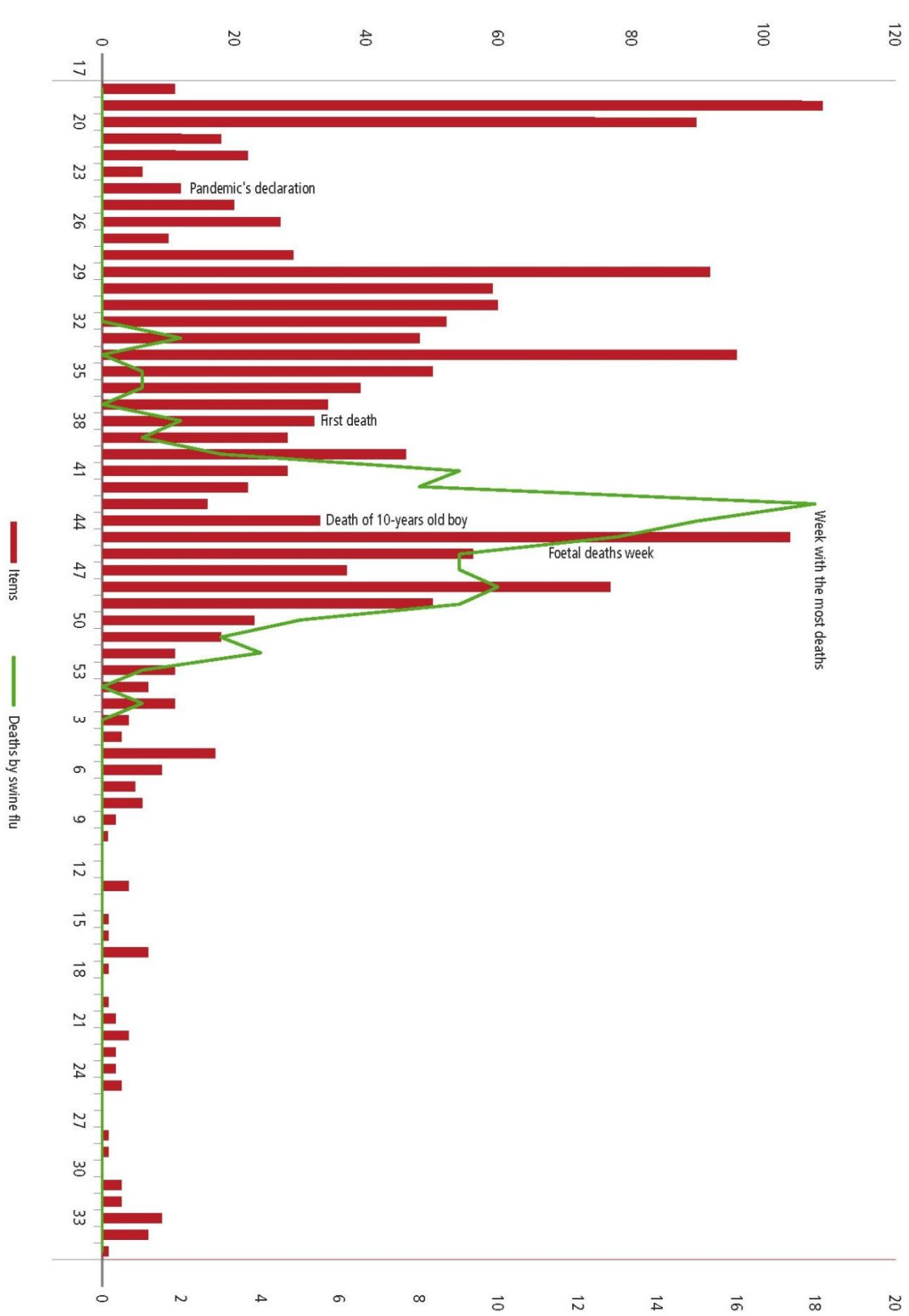
Figure 1. Co-relation of journalistic production indicators to deaths due to swine flu and other crisis milestones.

> I remember that in the summer of 2009, I already felt that we were giving too much emphasis on the subject, but I was pressed by publishers to continue to explore new angles to the story. I was told that the policymakers are the experts. They have access to first hand information. I remember talking to a pulmonologist on the reduced impact of swine flu and he quickly rebut it, noting that the seasonal flu kills mainly elderly, but this was different. And the impact and social alarm caused by the death of a young person in his early twenties, marks a different context. It shocks us more. (Author's interview with a daily newspaper journalist)

Health officials complained of the high expectations and drama of journalistic stories in the early weeks of the event. The focus in the worst scenario, when there were several on the table[2], and the obsession with counting infected patients and updating the rankings produced general high expectations of a serious health problem. When this did not happen, the media demobilized, fuelling the perception that preventive measures had been a false alarm and a waste of resources. In fact, it is likely that the epidemiological point (the curve progression of contagion) had been delayed by the very containment measures—a triumph of public health management. The quotes below show this, though most journalistic accounts of the flu do not.

> We delayed the epidemic process compared with other countries precisely because we treated each patient individually and because we had prepared people and institutions. We traced chains of transmission up to two thousand cases at the end of August. This is remarkable. The network of health care worked well and it was ready for a worse situation. Hospitals put into practice measures of isolation very effectively when no one knew what was coming. We acted in an uncertain scenario and we succeeded. (Author's interview with the Director-General of Health)
> In a health problem strongly affected by uncertainty, we plan for the worst and expect the best. It cannot be otherwise. No one prepares for an earthquake of level one on the Richter scale. A contingency plan is not worth making for such an incidence. We prepare for various scenarios, always recognize that medicine is not an exact science like mathematics. The medicine is practiced according to the evidence available in each moment, because it is not a science based on You Tube. And the evidence told us that this year's flu virus was predictably unpredictable. (Author's interview with a pulmonologist)

Journalistic interest quickly faded by December 2009 and the first weeks of 2010. Health professionals believe that the dismissal was caused by the saturation of the swine flu's task force, deployed for seven months in a row, and by the interruption of standardized information production to the media. By this point, journalistic expectations for a worst-case scenario had not materialized, leaving some journalists feeling vaguely disappointed that the flu was no longer a lead story.

In the journalistic field, the perception is necessarily different. The incentive of main health sources disappeared, discretely signaling the decrease of government interest in dealing with the topic. At the same time, in early 2010, the first international news emerged, associating the pandemic's management to economic interests in the purchase of vaccines.

The television journalist the author has interviewed suggests a final factor. She recalls that, by January, for the first time the swine flu death toll provided by the Ministry of Health did not match the balance sheets newsrooms were keeping. This suggested to some journalists that the statistics behind the pandemic were subject to manipulation, fuelling stories on false alarms and hysteria. In fact, statistical corrections were being included as new autopsies were processed and subsequently associated further deaths to the virus.

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[2] Several scenarios were previewed in May 2009. The worst possible situation would have been the contamination of two to three million people in Portugal, with a presumed death-toll of around 150,000 people, had the H1N1 virus matched the 2004-05 avian flu virus mortality rate. Milder scenarios were also contemplated but they seldom reached the media.

It seems clear then that the epidemiological and journalistic narratives were processed at different rates. The journalistic storyline consumed complementary frames for several months, strengthening the construction of flu as a severe health alarm. During the summer of 2009, the media debate was around the degree of preparation of social institutions like schools, courts, businesses, and others. Eventually, the saturation point came—the moment when the majority of mainstream media deemed the threat as an unnecessary alarm. This narrative took place with several fast spikes and an acute demobilization from November on.

The epidemiological narrative was gradually built, following the evolution of the indicators of the epidemic. As with the seasonal influenza, the infection slowly rose as the health services concentrated on slowing the advance with prophylactic care. By August, containment measures became useless. The infection quickly progressed and caused deaths and critical situations. From November 2009 to March 2010, the health alarm was at its worst, consuming most of the ministry's resources. Yet, the media had largely ceased coverage of the H1N1 virus in December 2009, fully three months before the end of the worst part of the health alarm.

Conclusion

The risk society produces frightening alarms on all systems managed by security protocols. The globalization of information tends to make such events appear more frequently in the media agenda then they did prior to the global age (Beck, 1992). There is a natural space for rebuttal of expert voices in any democratic regime, because science does not have the monopoly of knowledge, but rather develops as new data challenge prevailing wisdom (Kuhn, 1962). Scientific assumptions thus have a transient nature and must be accepted on conditional authority; they are right until they are proven wrong (Kuhn, 1962). With all its shortcomings, however, scientific expertise is the cornerstone of the industrial-technological system of modern society and its desecration, or even its systematic questioning, generates new anxieties (Giddens, 1991).

In a public health alarm, there are contingency plans prepared to manage the threat, define scenarios and communicate with the public. According to WHO, in an emergency, the pillars of crisis communication are the early announcement of epidemic potential, the information transparency, the accuracy in public reports, the recognition of uncertainty areas, and the public involvement in the process (Lima at al., 2009).

The results suggest the need for broad reflection on the role of media in a health alarm. Journalism outlets are not limited to information diffusion. They apply filters, frames, and production constraints and integrate them into a larger process, which relies heavily on subjectivity of the social leadership structure.

As discussed here, this transformer filter may have little relevance to the needs of crisis management and prioritization of information from the expertise point of view. It is not mandatory, or even desirable, that the journalistic narrative reflects the priorities and epidemiological narrative of a health alarm, like a mirror. There is a space for healthy competition and contestation of the primary frames. But crisis managers need to reflect on the motivations that lead to journalistic narratives so drastically different and distinct from the epidemiological one. People also need to ask whether the public will come out more enlightened with this process.

The journalistic story proved to be more influenced by the production of pseudo-events, minor occurrences involving celebrities or staged occurrences, than by signals emitted by the crisis managers at the later alarm levels of the epidemic. This discrepancy should arouse reflection on newsrooms and on public health managers in an effort to decrease the gap between the two sides when the next alarm arrives. Patterson's solution of knowledge-based journalism (Patterson, 2013), opposed to breaking-news journalism, can present a wealthy starting point for a discussion on reporting under the gun.

References

Anderson, A. (2002). The media politics of oil spills. *Spill Science & Technology Bulletin, 7* (1-2), 7-15.

Beck, U. (1992). *Risk society: Towards a new modernity*. London: Sage.

Beck, U. (1999). *World risk society*. Cambridge: Polity Press.

Cabral, M. V., Silva, P. A., & Mendes, H. (2002). *Saúde e doença em Portugal*. Lisbon: Imprensa de Ciências Sociais.

Cervantes, M. L., Venado, A., Moreno, A., Domínguez, R. L. P., & Pierres, G. O. (2009), On the spread of the novel influenza A(H1N1) virus in Mexico. *Journal of Infectious in Developing Countries, 3* (5), 327-330.

Conrad, P. (2001). Genetic optimism: Framing genes and mental illness in the news. *Culture, Medicine and Psychiatry, 25* (2), 225-247.

Direcção-Geral da Saúde, DGH (2010). *Relatório da Pandemia da Gripe em Portugal, 2009*. Lisbon: Direcção-Geral da Saúde.

Eldrige, J., & Reilly, J. (2003). Risk and relativity: BSE and the British media. In Pidgeon, N., Kasperson, R., Roger, E., & Slovic , P. (eds.). *The social amplification of risk*. Cambridge: Cambridge University Press, 138-155.

Foucault, M. (1979). *Microfísica do Poder*. Rio de Janeiro: Graal.

Froes, F., Diniz, A., Falcão, I., Nunes, B., & Catarino, J. (2010). Óbitos por gripe pandémica A(H1N1) 2009 em Portugal. Período de Abril de 2009 a Março de 2010. *Revista Portuguesa de Medicina Intensiva, 17* (4), 11-19.

Giddens, A. (1991). *Modernity and self-identity. Self and society in the late modern age*. Cambridge: Polity Press.

Gonçalves, M. E. (2001). *O Caso de Foz Côa. Um laboratório de análise sociopolítica*. Lisbon: Edições 70.

Gonçalves, M. E. (2003). Imagens públicas da ciência e confiança nas instituições: Os Casos de Foz Côa e da co-incineração. In Gonçalves, M. E. (ed.). *Os Portugueses e a ciência. Entre a confiança e a contestação*. Lisbon: Dom Quixote, 157-197.

Gonçalves, M. E., Delicado, A., Bastos, C., Raposo, H., & Domingues, M. (2007). *Os Portugueses e os novos riscos*. Lisbon: Imprensa de Ciências Sociais.

Harding, P. (2009). Pandemics, plagues and panic. *British Journalism Review, 20* (3), 27-33.

Kuhn, T. (1962). The Structure of Scientific Revolutions, Chicago, University of Chicago Press.

Lima, M. L., Castro, P., Sousa, P. S., & Sobral, J. M. (2009). A febre da gripe nos jornais: Processos de amplificação social do risco. In Sobral, J. M., Lima, M. L., Castro, P., & Sousa, P. S. (eds.). *A pandemia esquecida—Olhares comparados sobre a pneumónica 1918-1919*. Lisbon: Instituto de Ciências Sociais, 179-195.

Link, B., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 32, 80-94.

Lopes, F., Ruão, T., & Marinho, S. (2010). Gripe A na imprensa Portuguesa: Uma doença em notícia através de uma organizada estratégia de comunicação. *Observatório Journal, 4* (4), 139-156.

Lupton, D. (2003). *Medicine as culture*. London: Sage.

Mathison, S. (1998). Why triangulate? *Educational Researcher, 17* (2), 13-17.

Murdock, G., Petts, J., & Horlick-Jones, T. (2003). After amplification: Rethinking the role of the media in risk communication. In Pidgeon, N., Kasperson, R., & Slovic, P. (eds.). *The social amplification of risk*. Cambridge: Cambridge University Press, 156-178.

Nerlich, B., & Halliday, C. (2007). Avian flu: The creation of expectations in the interplay between science and the media. *Sociology of Health, 29* (1), 46-65.

Patterson, T. (2013). *Informing the news*. New York: Random House.

Ramonet, I. (1999). *A tirania da comunicação*. Lisbon: Campo das Letras.

Rebelo, J. (2006). Prolegómenos à narrativa mediática do acontecimento. *Trajectos*. 8-9, 17-27.

Rosa, G. P. (2013). Os novos riscos nas notícias, a construção social do naufrágio do Prestige e da pandemia de gripe A. Doctoral dissertation. ISCTE-Instituto Universitário de Lisboa.

Silva, P. A. (2011), *A saúde nos media, representações do sistema de saúde e das políticas públicas na imprensa escrita Portuguesa*. Lisbon: Mundos Sociais.

Silveira, J., & Shoemaker, P. (2010). *Telejornais em Exame*. Lisbon: Colibri.

Tuchman, G. (1978). *Making News.* New York: The Free Press.

Ungar, S. (2008). Global bird flu communication. Hot crisis and media reassurance. *Science Communication, 29* (4), 472-497.

Van Dijk, T. (1988). Semantics of a press panic. *European Journal of Communication*, 3, 167-187.