

The Invisible Fear
Representations of H1N1 in the Vietnamese Online Newspapers

To Nhu Thanh Huynh

2010–2011 Penn Humanities Forum
Undergraduate Mellon Research Fellowship

The Invisible Fear: Representations of H1N1 in the Vietnamese Online Newspapers

Abstract

Epidemics, from the 14th century Black Death to the 1918 Spanish Flu, are dramatic moments in history not only because of their devastating consequences, but also because of the particular responses constructed by society in an attempt to make sense of them. In this study, I aim to examine the Influenza A (H1N1) pandemic-a media sensation in 2009 and 2010- as dramaturgically structured by narrative sequences and representations that move from increasing dramatic tension to heightened crisis and onto closure in the Vietnamese online newspapers. Specifically, I explore how the disease was defined and its causes were explained, what moral connotations were conveyed, and what solutions were recommended. Social representation theories and existing works on social representations of SARS and Ebola form the framework in which I analyze the significance and implications of these issues.

Introduction

Influenza A (H1N1) was a major international health crisis that caused great media sensation in 2009. The H1N1 virus strain resulted from re-assortment of human influenza and swine influenza viruses (Furuse et al., 2010). It causes flu-like symptoms, including fever, cough, sore throat, body aches, headache, chills and fatigue. The first cases of H1N1 were reported in Mexico and the United States in April, 2009. Within two months, thousands of people were infected, with cases reported from more than sixty countries (Center for Disease Control and Prevention (CDC), 2010). On June 11th, the World Health Organization (WHO) declared a global H1N1 pandemic for the first time in forty one years (CDC).

The first case of H1N1 infection in Vietnam was reported on May 31, 2009 in a student who returned home from the U.S. Despite many efforts to contain the infection, by the second half of July the virus started circulating in Ho Chi Minh City (Hien et al., 2010). Having grappled with the deadly H5N1 avian flu in recent years, Vietnamese health authorities faced major challenges with H1N1. Intensive media coverage, especially after the unusual pandemic declaration of the WHO, stroke fear into the hearts of many people. This research uses content analysis of the online media coverage of the 2009-2010 H1N1 pandemic to identify the representations of H1N1 in Vietnamese online newspapers. These representations play an influential role in shaping how people perceive emerging health risks and make decisions about health behaviors (Harrabin, Coote, & Allen, 2003).

Background

Social Representations Approach

Social representations theory outlines how people understand phenomena in their

everyday life (Moscovici, 1984,). It is a common approach to study public understandings of new technology (e.g. Bauer & Gaskell, 1999), and mass beliefs about health and illness. Social representations are terms, opinions, attitudes, and images through which people organize and mediate their world. According to Jodelet (1991), they are “images that condense manifold meanings that allow people to interpret what is happening” (as cited in Howart, 2006, p. 70). Social representations theorists argue that non-specialists do not have a “scientific” approach to a given subject, but understand and share their “common sense” knowledge through these representations. The theory assumes that the technical knowledge of a given subject is often not fully accessible to the lay public. Even if it were, the public would not be motivated enough to examine it closely (Joffe and Lee, 2004).

The mass media is a major outlet to disseminate social representations, offering a vehicle for the general public to make sense of emerging risks. According to Douglas (1994, as cited in Joffe, 2003), while the technical definition of risk is ‘the probability of an event combined with the magnitude of the losses and gains that it will entail’ (p. 40), from a lay perspective risk often entails negative outcomes. Joffe (1999) argues that as new risks are communicated and interpreted by journalists and lay people, two key processes, anchoring and objectifying, take place. Anchoring refers to drawing on past seemingly similar events to make sense of the unfamiliar event, and objectifying is the shaping of an abstract concept into concrete images and symbols that have meanings for the people who interpret it (Joffe). One typical mechanism of dealing with risks and their negative outcomes, as Joffe asserts, is to blame “the other” or other groups of people and to underestimate the risks faced by the self. For example, the emergence of HIV/AIDS in Britain is anchored to the unhygienic or immoral practices of other groups such as the gay communities (Joffe). The homosexual communities therefore bear the most blame for the novel disease.

The Online Media and the State in Vietnam

The Internet has rapidly become one major access point for news in Vietnam. While the percentage of the Vietnamese population using the Internet was 10.9% in 2005 (OpenNet Initiative, 2006), this number almost doubled to 21% in 2009 (World Bank, 2009). The number of online newspapers also increased. VnExpress became the first Vietnamese electronic newspaper in 2002, and today there are approximately 10 exclusively web-based newspapers. Fierce competition in the market economy and the rapid development of information technology also motivate most traditional paper-based newspapers to open their online news portals.

The Vietnamese media are exclusively owned by State agencies (Marr, 1998). Kerkvliet (2001) points out that, in such context, the news media provides a vehicle for the state not only to “inform and educate citizens but also to inundate them with official positions...and to mobilize people to do what government, party, and mass organization leaders require” (as cited in Hill, 2008). On the one hand, analysis of the media provides a means of tracking policy pronouncements and government’s legislation. On the other hand, a wide range of opinions and expressions can be found in the Vietnamese media. The 1986 economic liberalization of Renovation (Đổi Mới) has resulted in rapid socio-economic

changes, enabling increased transnational flows of economic goods and culture. The increasing presence of the international media has substantially increased social awareness (Witter, 1996).

Methodology

On July 9, 2010, a Google Vietnam search was conducted to identify all online articles in the Vietnamese language using the term “H1N1.” The search yielded 692,000 results (see appendix 1.1). The article selection criteria include: (1) the article must be from a licensed Vietnamese media agency. The license information is often found in the standardized form of “Newspapers license number [number], issue on [date]” and is available in all legitimate news website; (2) the article must be originally written by the respective newspaper; (3) it should not merely report facts but must have some degree of analytical content regarding disease etiology, recommendations or related discussions. The study excludes articles from sites other than the legitimate news sources, translated articles from foreign news sources such as BBC or CNN, and relatively short descriptive pieces on the number of new H1N1 cases. Beside the main results, Google also offered suggestions for similar articles from the same newspaper. These articles were not included because their content tends to be recycled.

The top five articles were initially selected using the above criteria, and the researcher added more articles for analysis until no new theme could be identified (Glaser & Strauss, 1967). A total of ten articles from nine newspapers were selected (table 1). They include editorials, news reports, and opinions. Seven articles were published in 2009, mostly in the months of July and August. Three were published in early 2010. The newspapers are mostly from the Vietnam Communist Party and various government authorities, including the Ministries of Information and Communication, and Science and Technology. One exception is VN Economy, published by the Vietnam Economic Association, a professional association of economists and experts in the field.

Table 1. Online newspapers collected from Google with the key word “H1N1”

Article no.	Newspaper	Source	Distribution	Date of Publication	
				2009	2010
1	VietnamExpress	Ministry of Science and Technology	Internet	May	
2	Thanh Nien	Communist Youth Union	Internet and National (hard copies)	July	
3	Tuoi Tre	Youth Association of Ho Chi Minh (HCM) City	Internet and National	July	
4	VN Economy	Vietnam Economic Association	Internet and National	July	
5	Vietnamnet	Ministry of Information and Communication	Internet	July	
6	Tuan Vietnam	Ministry of Information and Communication	Internet	August	
7	VOVnews	Ministry of Information and Communication	Internet and National (broadcasting)	August	
8	VietnamExpress, (via Vietbao)	Ministry of Science and Technology	Internet		January
9	Ha Noi Moi	Hanoi's Communist Party	Internet and Hanoi		January
10	Saigon Giai Phong	People's Committee of HCM City	Internet and HCM City		March

The sample fairly represents the most widely-read newspapers in Vietnam. Previous research on Vietnamese media cited five of the above nine newspapers, Thanh Nien, Tuoi Tre, VietnamExpress, VietnamNet, and Saigon Giai Phong, as the most circulated daily newspapers (Hill et al., 2007). The researcher's personal experience of living in Vietnam and the native informants' also confirm that they are relatively popular domestic news sources. Additionally, the sample represents both national and provincial interests and reflects the voice of various demographics, including professionals and youths. All newspapers provide both electronic and print editions, except for the exclusively web-based VietnamNet and VNexpress.

All articles were analyzed using NVivo8 qualitative research software, with an initial coding frame based on Washer's (2004) work on SARS and Joffe and Lee's (2004) on avian bird flu. New themes, however, emerged and were included as the analysis proceeded. One coder independently coded all content with the initial frame, adding new themes as they emerged. A second coder also independently coded a selected number of articles and reviewed the first coder's themes. The preliminary findings were exchanged with follow-up discussions of how to keep the coding process consistent. As a consensus on the themes was reached, earlier codes were revised whenever necessary.

Results

From mid 2009 to early 2010, several key themes emerged and were developed in the newspapers. Because of the small sample size that reflects a discontinuing timeline, rather than in a chronological narrative, this analysis will broadly outline the H1N1 pandemics in terms of problem definitions, causal explanations, impacts, and solution recommendations.

Table 2. Selected themes. See appendix 2 for a complete list of themes and occurrences

Broad Category	Theme	Source			Occurance(s)	Articles
		Washer (2004)	Joffe and Lee (2004)	Newly emerging themes during coding		
Problem Definitions	Graphic description	X			5	3
	Foreign countries	X			41	6
	Geographically distant	X	X		25	5
	Spread quickly			X	29	5
	Killer/deadly/death	X	X		21	7
	Modes of transmission			X	5	3
	Not dangerous	X			24	5
	Symptoms			X	12	4
Anchoring	Earlier or other epidemics	X	X		19	6
	Western concern for health and well-being			X	3	1
Causal explanations	Risk factors			X	3	2
	Population growth	X			2	2
	Poverty	X	x		5	2
	Hygiene	X			2	2
	Local customs	X	x		3	2
	Travel	X	x		23	6
	Environment			X	7	4
Impacts	Effect on economy	X	x		6	2
	Microbe evolving	X			2	1
	Next plague	X			3	2
	New microbial threat	X			10	7

	Fear and anxiety				29	7
Responsible authorities	National health agency			X	40	10
	International health agency			X	30	7
	Local health agency			X	25	8
	Expert's comment			X	33	8
	Medical facilities				33	8
Accusations and criticisms	Marginal/Specific populations	X	x		7	5
	Mis-interpretation of information			X	11	2
	Passive locals	X			12	1
	News Reporting			X	14	1
	Profit making/Taking advantage			X	7	3
	Pharmaceutical company			X	13	4
	Wasteful of resources			X	7	2
	Skepticism			X	21	3
	Exaggeration			X	11	4
Challenges	Barrier to care and prevention			X	12	2
	Barrier to info			X	3	1
	Accuracy of info			X	1	1
	Quantity of info			X	1	1
Solution recommendations	Screening			X	15	5
	Medication			X	10	4
	Readiness to respond			X	15	7
	Prevention measure			X	89	9
	Treatment measure			X	42	9
	Vaccine			X	17	3

Problem definitions

H1N1 was initially described with relatively militarized terms such as “attacking,” “spreading quickly,” and “killing” (Tuan Vietnam). VNEconomy wrote that “in the worst scenario,” the disease could “rob the lives” of many people. To describe the effort to contain the disease, one article addressed the need to convert a school into a “field combat clinic” (bệnh viện dã chiến) (Tuoi Tre). The ideas of contagion and contamination were vaguely mentioned by one Vietnamese interviewed by the news reporter. She compared how H1N1 patients were avoided like those with leprosy (Tuan Vietnam).

New cases, death counts, and economic loss in many “foreign countries” such as the U.S., Hong Kong, Mexico, the UK, and Spain were reported to highlight the global impact of H1N1. The fact that H1N1 was “spreading quickly” across borders and creating new hot spots in Latin America, North America, and Europe was mentioned by 5 articles in 29 occurrences.

While 7 articles mentioned death in 21 occurrences, most of them reported the death counts and few explicitly emphasized the lethal nature of the virus. In fact, the severity of H1N1 was often anchored to that of the seasonal flu. “The death rate of H1N1 is equal or even lower than that of the common flu at one time or another,” Hanomoi reported. The modes of transmission were also described to be similar to the seasonal flu (VnExpress, Thanh Nien, Tuan Vietnam). Very often the articles highlighted that H1N1 was “spreading quickly” across the globe but reassured that it was “not dangerous.” One article juxtaposed H5N1 and H1N1 with the heading “H5N1 virus evolves into more deadly, H1N1 pandemic progresses unpredictably” (Saigon Giai Phong). Unlike H5N1, H1N1 was a health alert not because it was deadly but because of its readily transmittable nature.

Causal explanation

Like how SARS is thought to originate from horses or pigs (Washer, 2004) and

AIDS “jumped” from monkey (cite), the H1N1 virus was believed to “mutate” from bird. Its origin was anchored to the recent H5N1 virus. “[...] The root of this fear was stemmed 5 years ago, when many were afraid that a more dangerous type of virus in bird will turn into one in human” (VnExpress, 2010).

“Travel,” especially international travel, is a prominent theme in discussing the virus transmission. The earliest article reporting the first case of H1N1 in Vietnam read “Influenza A/H1N1 got into Vietnam” (VnExpress, 2009). It went on to describe the first case, who was a Vietnamese student coming back home from Wisconsin, and the large number of visitors from “infected areas” at the country’s major international airport. Articles during July-August of 2009 also reiterated that the source of the pandemic came from visitors from foreign countries, specifically America (Vn Express, Tuoi Tre, Thanh Nien, Tuan Vietnam).

“Environment”, “population growth”, and “local customs” were also to blame for the spread of the virus. Only one out of four articles, however, negatively attributed the H1N1 spread to the polluted environment in Vietnam (Tuan Vietnam). The rest emphasized keeping environment clean as a way of prevention. Local practices, often coupled with people’s attitudes, were also highlighted. According to VietNamNet:

At crowded places where the virus could spread easily like bus stations, hospitals... many were ignorant of influenza A/H1N1. At East station, thousands of people came and went since early morning; at the ticketing booths many gathered at the waiting area, yet very few wear masks to prevent the spread of the disease. Even the staff who directly contacted with thousands of customers everyday also paid little attention to the pandemics. One staff member said, “we heard warnings about influenza A/H1N1, but there’s no other way, because it’s difficult to communicate with customers if we wear masks or clothes for prevention.”

Impacts

4 sub-populations, including people with chronic conditions, children, elder adults, and pregnant women were identified as particularly at greater risk (VnEconomy, Thanh Nien, Hanoimoi). 2 articles briefly mentioned the economic impact of the outbreak, reporting how H1N1 caused “social disorders” in several countries (VnEconomy, Tuan Vietnam). There were also concerns that the H1N1 virus could mutate into a more dangerous strain.

While “fear and anxiety” was the recurring theme about the public’s reactions, these feelings were often assuaged by claims that H1N1 was manageable. “There were 1.000 types of diseases that cause fever, but it is relatively simple to protect oneself from H1N1, and therefore everyone should not be worried,” quoted a doctor in Thanh Nien.

Challenges and solutions

At the international level, the limited access to vaccines in poor countries was attributed to economic disparity. The barriers to care, prevention, and information were also identified in terms of social and economic constraints:

“..., there are many people who do not understand [about H1N1] because they do not have the opportunities to. They are the poor workers in urban centers, old people, farmers, and the poor in general.”

The WHO, the Vietnam Ministry of Health, and local health agencies are the three

biggest authorities responsible for dealing with the outbreak. While the WHO was referred to 30 times in 7 articles as the leading source of news updates and recommendations, all the articles cited the prevention and treatment efforts made by the national and local health agencies. A close collaboration, especially between the local and the national agencies was emphasized. Beside these agencies, information came mostly from healthcare experts, or leaders of health-related government agencies. “Biomedical facilities” such as hospital and clinic also played an active role in screening and treatment. No alternative medicine was mentioned.

The theme “prevention measure” appeared 89 times in 9 articles, while “treatment measure” appeared only 42 times. The Ministry of Health, in collaboration with the local authorities, made strategic decisions such as forming special committees in schools for surveillance and closing schools with infected students. The government urged the mass to help reduce the virus transmission through the adoption of personal hygiene measures. Beside preventing, “readiness to respond” to local outbreaks was also a recurring theme. Prevention, rather than treatment, was overall the focus of the news.

Accusations and criticisms

In the articles from early 2010, “vaccine” started to emerge as a new theme. Interestingly, it was often discussed together with the suspicions of the influenza A, H1N1 outbreak being “false alarm”. There were speculations about a conspiracy to inflate the scope of the outbreak between big pharmaceutical companies and the WHO. Another theory placed the entire blame on the pharmaceutical companies, who waited for the pandemic announcement from WHO to “start their contracts” to sell vaccine. Many countries were quoted as victims, having their national resources wasted on H1N1 vaccines:

“The European Union initiated an investigation after receiving claims from leading health experts that the “H1N1 pandemics” was a scenario set up by pharmaceutical companies, who earned billions of dollars from the fear of the world.”

“...Pharmaceutical companies made “enormous profit” while many countries had to waste their healthcare funds to vaccinate millions of people to prevent a relatively mild disease.” (VnExpress, 2010)

The H1N1 ‘false alarm’ accusations were placed in a global context, involving many countries as victims. Vietnam was neither exclusively nor explicitly victimized. Besides, one article, published in August 2009, criticized the Vietnamese media for “exaggerating” the pandemics, providing excessively shocking information without further explanation in order to increase sales (Tuan Vietnam).

Discussion

Although retelling the story of the Vietnamese H1N1 pandemic chronologically was not the focus of this analysis, a broad narrative did emerge. In late May, 2009, Vietnam identified the first case of H1N1. The outbreak had been first introduced to the public as an international health issue that affected many countries across the globe. This discourse was reiterated, especially in the vein of international travel, throughout the

following articles published during July and August of 2009. The general consensus was that the virus was readily transmittable and could be anchored to more current health risks such as the avian and seasonal flu. By doing so, regardless of their original intention, the news reports helped domesticate the H1N1 pandemic.

The domestication of H1N1 was evident when examining the role of local and national health authorities in dealing with the outbreak. Unlike previous research on other public health issues has shown, the data showed little evidence that the H1N1 pandemic in Vietnam was represented in the discourse of “us” and “the other.” Crowded conditions in Vietnam and local people’s failure to take precautions partly accounted for the spread of the virus. Beside the WHO, the Vietnamese national and local health agencies remained vigilant and played an active role in slowing and preventing the virus transmission. However, particular groups such as those who lack knowledge or access to information, poor people, workers, and farmers were mentioned as being most likely to over-react or least likely adopt prevention and treatment measures.

By the spring of 2010, mortality data demonstrated a decrease in the severity of the pandemic (WHO, 2010). In the articles published during this period, “vaccine” emerged as a new theme. There was much discussion about the potential profits that pharmaceutical companies might gain from the vaccine suppluses, which costed governments enormous amount of money. Commentators in the British journals called this reaction “the search for scapegoats” (Delamothe, 2010). A recent study on representations of H1N1 in the United Kingdom newspapers, however, found little accusations of drug companies and of the WHO (Hilton&Hunt, 2010). This might reflect the frustration and contempt stemmed from Vietnam’s past experiences of SARS and H5N1. That the WHO was suspicious of inflating the pandemic to help drug companies could potentially create a feeling of distrust among the public, undermining the effectiveness of health recommendations from the WHO. Little attention was paid to vaccine development, vaccine safety or potential side effects in special population. This could mean that vaccine was not a common prevention measure in Vietnam, because of the belief that “only rich countries will get the vaccine.” This could also mean that more attention is needed.

While this analysis aims to explore the representations of H1N1 in online newspaper, the extent to which the public perceived and was affected by these representations was beyond its scope. Another limitation is its inability to construct a chronologically coherent narrative of the H1N1 pandemic in Vietnam. The lack of a comprehensive archive for the Vietnamese newspapers partly account for this limitation. As Google searches for content that is most clicked and linked to in the internet, it is reasonable to assume that, at the time of the search, the articles in this analysis were the most read online news about H1N1. H1N1 attracted most media attention in August and July of 2009, when it started to spread in Vietnam. Although the absence of coverage in the following months reflected less fervent public interest, the analysis is limited in asserting other reasons for this absence. Furthermore, although media stories tend to be recycled, the online articles are not representative of the print media or other media forms, which may reach a wider Vietnamese audience. Last but not least, while there was a second coder who coded a selected number of articles and reviewed the codes, the reliability of the data could

have been improved if all the articles were coded independently by more than one coder.

In summary, the media plays an important role in disseminating scientific information and shaping the public's perception of health risks. The Vietnamese newspapers have been overall cautious in communicating the novel H1N1 risk to the public. The H1N1 pandemic was first portrayed as an international health issue that affected many countries in the world, including Vietnam. However, there was little evidence that the newspapers undermined the health risk of H1N1 because it was a problem of "the other." The outbreak was soon domesticated as its causal explanations, impacts, and recommendations were closely discussed in the local context of Vietnam. Although H1N1 was overall portrayed in reflection of scientific uncertainties of a novel disease, the newspapers offered reassuring messages to assuage the fear and anxiety about the virus. The concern that the level of news coverage was over-hyped reflected the media's consciousness of their impact on the public. The suspicions surrounding vaccines and profits of drug companies and the WHO provide a cautionary tale in public perception of risks, but might also undermine the role of vaccination and international health authorities in major health crisis.

Acknowledgements

I would like to thank Dr. Giang T Nguyen and Dr. Fran Barg for their invaluable advice and feedbacks. I am also grateful to my Vietnamese friends who offered me great insights on the subject of H1N1 and the media in Vietnam.

References

- Bauer, M.W. & Gaskell, G. (1999). *Towards a paradigm for research on social representations*. Journal for the Theory of Social Behaviour, 29(2), 163-186.
- Center for Disease Control and Prevention. (2010). *The 2009 h1n1 pandemic: summary highlights*, april 2009-april 2010. Retrieved from <http://www.cdc.gov/h1n1flu/cdcresponse.htm>
- Delamothe T. *H1N1: now entering the recrimination phase*. Br Med J 2010;340:c225.
- Furuse, Y, Suzuki, A, & Oshitani, H. (2010). *Reassortment between swine influenza A viruses increased their adaptation to humans in pandemic H1N1/09*. Infection, Genetics and Evolution
- Glaser, BG & Strauss, AL. *The discovery of grounded theory: strategies for qualitative research*. Chicago: Aldine Publishing Company. 1967
- Harrabin, R, Coote, A, & Allen, J. *Health in the news: risk, reporting and media influence*. London: King's Fund Publications. 2003
- Hanoimoi, 2010. *Số ca mắc cúm A/H1N1 tại Việt Nam giảm rõ rệt*. 14 Jan 2010. Retrieved

from http://www.hanoimoi.com.vn/newsdetail/doi_song/305493/so-ca-mac-cum-ah1n1-tai-viet-nam-giam-ro-ret.htm

Hien TT, Boni MF, Bryant JE, Ngan TT, Wolbers M, et al. (2010) *Early pandemic influenza (2009 H1N1) in Ho Chi Minh city, Vietnam: a clinical virological and epidemiological analysis*. PLoS Med 7(5): e1000277. doi:10.1371/journal.pmed.1000277

Hill, PS, Ngo, AD, & Khuong, TA. et al. (2009). *Mandatory helmet legislation and the print media in vietnam*. Accident Analysis and Prevention, 41, 789-797.

Howarth, C (2006). *A social representation is not a quiet thing: exploring the critical potential of social representations theory*. British journal of social psychology, 45 (1). pp. 65-86.

Joffe, H. (1995). *Social representations of aids: towards encompassing issues of power*. Papers on social representations, 4(1), 29-40.

Joffe, H. (2003). *Risk: from perception to social representation*. British Journal of Social Psychology, 42, 55-73.

Joffe, H., & Lee, N.Y.L. (2004). *Social representations of a food risk: the Hong Kong avian bird flu epidemic*. Journal of Health Psychology, 9, 517-533.

Joffe, H. (1999). *Risk and the other*. Cambridge: Cambridge University Press

Marr, D. (1998). *Mass media in vietnam*. Canberra: Australian National University.

Moscovici, 1984S. *The phenomenon of social representations*. In: R. Farr and S. Moscovici, Editors, *Social Representations*, Cambridge University Press, Cambridge (1984), pp. 3-69.

OpenNet Initiative. (2006). *Internet filtering in Vietnam 2005-2006: a country study*. Retrieved from http://74.53.24.87/bizlist/photos/ti/intell_staff/ONI_Vietnam_Country_Study.pdf

Saigon Giai Phong, 2010. *Cúm A/H5N1 và H1N1 có nguy cơ bùng phát mạnh*. 13 March 2010. Retrieved from <http://www.sggp.org.vn/ytesuckhoe/2010/3/220733/>

Thanh Nien, 2009. *Tu bao ve minh khoi cum A/H1N1*. 29 July 2010. Retrieved from <http://www.thanhvien.com.vn/news/Pages/200931/20090729074334.aspx>

The World Bank. (2009). *Regional fact sheet from the world development indicators 2009*. Retrieved from http://siteresources.worldbank.org/DATASTATISTICS/Resources/eap_wdi.pdf.

Tuan Vietnam, 2010. *Cúm a/h1n1 lan rộng hay giới truyền thông đang hung hăng*. 1 August 2009. Retrieved from <http://tuanvietnam.vietnamnet.vn/cum-a-h1n1-lan-rong-hay-gioi-truyen-thong-dang-hung-phan>

Tuoi Tre, 2009. *Cúm a/h1n1 bắt đầu lây trong cộng đồng*. 21 July 2009. Retrieved from <http://tuoitre.vn/Chinh-tri-Xa-hoi/327544/Cum-AH1N1-bat-dau-lay-trong-cong-dong.html>

VnEconomy, 2009. *Cúm A/H1N1 tiếp tục diễn biến phức tạp*. 20 July 2009. Retrieved from <http://vneconomy.vn/20090720111739402P0C99/cum-ah1n1-tiep-tuc-dien-bien-phuc-tap.htm>

VnExpress, 2009. *Cúm A/H1N1 đã vào Việt Nam*. 31 May 2009. Retrieved from <http://vnexpress.net/gl/doi-song/2009/05/3ba0f9be/>

VnExpress, 2010. *'Đại dịch cúm H1N1 là giả mạo.'* 11 January 2010. Retrieved from <http://vnexpress.net/GL/Doi-song/2010/01/3BA1796F/>

VietnamNet, 2009. *Cúm a/h1n1 lan nhanh: người thờ ơ, kẻ lo sốt vó*. 29 July 2009. Retrieved from <http://www.vietnamnet.vn/xahoi/doisong/2009/07/860660/>

VOVNews, 2009. *Người biểu hiện cúm A/H1N1 phải điều trị ngay, không chờ xét nghiệm*. 25 August 2009. Retrieved from <http://vovnews.vn/Utilities/PrintView.aspx?ID=120153>

Witter, S. (1998). *Doi moi and health: the effect of economic reforms on the health system in vietnam*. The International Journal of Health Planning and Management, 11(2), 159-172.