Community in Panic: Perceptions, impacts and lessons at risk communication on Pangasinan Mysterious Disease

ADRIAN LAWRENCE CARVAJAL

St. Paul University Quezon City, Aurora Blvd, corner Gilmore Ave., Quezon City, Philippines adrianlpcarvajal@yahoo.com

Date Received: November 14, 2014; Date Revised: February 10, 2015

Abstract - Communicating information about possible life threatening concerns can be very delicately difficult, and if it is not done well, the communicator can put the affected public at greater risk by creating misunderstanding or possibly inciting unwarranted panic. On February 24, 2014, a late night news program reported that a "mysterious flesh-eating illness is slowly" spreading in Pangasinan, a province in the Philippines with a population of more than three million. The news report connected two case studies from the towns of Villasis and Santa Barbara, Pangasinan to a prophecy by a self-titled prophet who forewarns of a flesh-eating disease in the said province. Just hours after the report came out that night, the hashtag #PrayForPangasinan trended on Twitter, and link of the video have been boundlessly shared on Facebook and other online social media.

Anchored on the mental noise and risk perception theories, the study delves into the perceptions of risk of the affected public and determines the risk communication impacts and lessons of the Pangasinan Mysterious Disease. The findings of the study on the perceptions of risk by the affected public, the risk communication impacts and lessons on the news report is significant as the fundamental goal of risk communication is to provide meaningful, relevant and accurate information, in clear and understandable terms targeted to the concerned and affected publicand spur all concerned to a higher degree of consensus and support for a beneficial action.

Keywords: risk communication, Pangasinan, Philippines, mysterious disease, news report

INTRODUCTION

Researches and experiences confirmed that a risk communication strategy needs to focus onunderstanding how the public perceives risk, how the media translate information received fromscientists or public policymakers, and how representatives of the public and private sector can better relate risk information.

The very definition of "risk" varies depending on the user. Scientists generally define risk as the nature of the harm thatmay occur, the probability that it will occur and the number of people that will be affected (Groth,1991). Most citizens, on the other hand, are concerned with broader, qualitative attributes, such asthe origin of the risk (natural or technological), whether a risk is imposed or can voluntarily beassumed, the equitable distribution of risk over a population, alternatives and the power of individuals to control the risk (Sandman, 1987) and the perception of risk (Covello, 1992a; 1983).

Historically, risk communication was largely a oneway form of communicating, with the public being told what the experts think to be important. Risk communication is now a two-way, interactive engagement between the public and risk communicators (Bradbury, 1994; Ng & Hamby, 1997).

Risk communication has typically been associated with health communication and efforts to warn the public about the risks associated with particular behaviors. communication largely Risk has beenconceptualized as a problem of getting the public and/or specific target audiences toattend to identifiable risks, such as smoking, unsafe sex, or drinking and driving, and adjusting their behavior accordingly (Witte, 1995 as cited in Seeger, 2006). Crisis communication, incontrast, is more typically associated with public relations and the need fororganizations to repair damaged images after a crisis or disaster (Benoit, 1995;Coombs, 1999 as cited in Seeger, 2006). Recent efforts have been directed toward merging these traditions into a morecomprehensive approach. Led primarily by the work of the Centers for DiseaseControl (CDC), the merged approach is called "crisis and emergency risk communication" (Reynolds, Galdo & Sokler, 2002 as cited in Seeger, 2006).

The varied models of risk communication (RC) can be broken into four areas (Covello, 1991 as cited by Ng & Hamby, 1997): First, RC that informs and educates. People are informed and educated about risks and riskassessments in general.Second, RC that changes behavior.RC can encourage risk reductionbehavior by trying to influence the perceptions of the audience. Third, RC that provides disaster warnings andemergency information. RCcan communicate direction and behavioral guidance in disasters andemergencies. Lastly, RC as a joint problem solving and conflict resolution which involves the public in riskmanagement decision-making and in resolving health, safety, and environmental controversies.

Communication strategies should allow equitable access to risk information in multicultural and multilingual societies as well as cater to the information needs of different social and demographic groups (Clerveaux, 2009; Quinn, 2008). Moreover, when communicating with the public, the risk communicator must consider other issues including property values; decline in lifestyle resulting from traffic, noise, odor and dust; decline incommunity image; and any aesthetically objectionable qualities of the facility (Sandman 1985 as cited by Ng & Hamby, 1997).

According to Kasperson et al., 1992 as cited by Ng & Hamby, 1997, there are five goals to risk communication: (1) diagnosing and creatingtrust; (2) creating awareness strategies; (3) understanding why concepts are hard to grasp andfinding ways to overcome the problem; (4) developing mediating skills; and (5) motivating thepublic to act.

Parallel to the goals of risk communication is the critical involvement of the public to the risk communication process. Ng and Hamby (1997) citing Nathwani et al. (1989) explained that because of the community's desire to control one's self-direction and destiny, it is important to include the public in the risk management process. Some of the benefits of public involvement include: (1) community participation can make the decision more palatable to the public (Sandman 1985: Hyer&Covello, 2007): (2)communities are more likely toaccept decisions made with their input (Chess &Hance 1989; Hyer&Covello, 2007); (3) communities often have localinformation that the company may not have, and consequently, can help the company make betterdecisions; (4) the involvement of the community may lead to a greater understanding of the risk (Hyer&Covello, 2007); (5) cooperation will increase the company's credibility within the community (Sandman, 1985; Ng & Hamby, 1997, Hyer & Covello, 2007).

Mental Noise Theory

The research of Covello (1999)indicates that "when people are in a state of high concern caused by perceptions of asignificant health threat, their ability to process information effectively and efficiently

isseverely impacted. They experience emotional arousal and/or mental agitation generated by strong feelings of anxiety, worry, fear, hostility, anger, panic, and outrage which creates mental noise. Much like atmospheric static and its effect onradio communications, mental noise can reduce the ability of the individual to processinformation efficiently and effectively by as much as 80%." This implies that people have difficulty hearing, understanding, andremembering information and focus most on what they hear first, and they often have difficulty hearing. understanding, and remembering information.

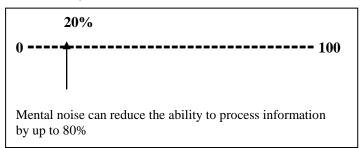


Figure 1. Mental Noise Paradigm

Risk Perception Theory

The perceptions of risk are affected by numerous factors. Alarm, apprehension, grief, anger, and fear can provokedrastic changes in attitudes and behaviors. The intensity of alarm, apprehension, grief, anger, and fear are likely to be most intense when the risk in question is perceived to be: involuntary, unfair, not under one's personal control, low in benefits, threatening to children, communicated by untrustworthy sources, associated with dreaded adverse, irreversible outcomes Because of the intense feelings such perceptions can generate, these characteristics are often referred to in the risk communication literature as "outrage factors".

Covello (1992) indicates that when present, outrage factors take on strong moral and emotional overtones. They predispose an individual to react emotionally, which can in turn significantly amplify levels of perceived risk and worry.

According to Rowan (2009), for risk communication to be effective, a third focus is also necessary: risk communicators need an understanding of communication as a problem solving process. He summarized four goals frequently pursued by risk communicators: creating awareness about the existence of important phenomena, enhancing understanding of complicated ideas, developing agreement about policy options, and motivating action.

(Lum&. Tinker, 1994) citing Fischoff, Lichtenstein, Slovic, Derby, &Keeney, 1981)					
Risks perceived to	are more accepted than risks perceived to				
Be voluntary	Be imposed				
Be under an individual's control	Be controlled by others				
Have clear benefits	Have little or no benefit				
Be fairly distributed	Be unfairly distributed				
Be natural	Be manmade				
Be statistical	Be catastrophic				
Be generated by a trusted source	Be generated by an untrusted source				
Be familiar	Be exotic				
Affect adults	Affect children				
Dermolds and Oning (2000) state that	during a handhad of Dalings and Dagal Dagman City is				

Tab	le 1. Factors	s Influenci	ng Risk	R Perception					
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Reynolds and Quinn (2008) state that during a crisis, an open and empathetic style of communication that engenders the public's trust is the most effective when officials are attempting to galvanize the population to take a positive action or refrain from a harmful act. Trust and credibility-which demonstrated through empathy and caring, competence and expertise, honesty and openness, and dedication and commitment-are essential elements of persuasive communication.Risk perception may be affected by the media (Sjoberg, 2011). This includes social networks (Petts & Niemeyer, 2010; Boholm, 2011; Agha, 2010).

Pangasinan: The Place of Pandemic Panic

Pangasinan is a province of the Philippines that is located on the western area of the island of Luzon along the Lingayen Gulf and South China Sea. Its provincial capital is Lingayen. It has 48 subdivisions comprising of 44 municipalities and 4 cities. In 2011, its census population is more than 3 million.

Pangasinan is the name for the province, the people, and the primary language spoken in the province. The name Pangasinan means "place for salt" which is attributed to its role as a major producer of salt in the Philippines.



Figure 2. Location of Sta. Barbarain the provincial map

Popular tourist attractions in Pangasinan include the Hundred Islands National Park and the white-sand

beaches of Bolinao and Dasol. Dagupan City is known Festival ("Milkfish Festival"). for its Bangus Pangasinan is also known for its delicious mangoes and ceramic oven-baked Calasiaoputo ("rice muffin"). Also places of interest arethe Shrine of Our Lady of Manaoag, Cape Bolinao Lighthouse in Bolinao, Cacupangan Cave in Mabini, Manleluag Spring National Park in Mangatarem, Puerto Del Sol Resort and Rock Garden Resort in Bolinao and beach walk of Lingayen.





The Pangasinan Mysterious Diseases News

On February 24, 2014, a late night newscast of ABS-CBN's Bandilareported that a "mysterious" "flesh-eating illness" (misteryosongsakit) is "slowly" (unti-unti) spreading in Pangasinan. The news report connected two case studies from the towns of Villasis and Santa Barbara, Pangasinan whose skin were described to be "decaying" (naaagnas) to a prophecy by a self-titled prophet who forewarns of a flesh-eating disease in the said province. The flesh-eating disease is known medically as Necrotizing fasciitis. Just hours after the report came out that night, the hashtag #PrayForPangasinan trended on Twitter, and link of the

video have been boundlessly shared on Facebook and other online social media.

The reporter, clad in protective gear and face mask, reported the news as follows:

"The mysterious disease is now spreading over the region and local medical experts have no idea what kind of medical phenomena they are facing. The victims who contracted the mysterious disease are suffering from multiple skin lesions or wounds which are painful as if devouring the flesh slowly. According to the mother of one of the victims, the disease started out as rashes until it worsened. She also revealed that they are wondering why worms and ants are coming out of the wounds made by the mysterious illness" ("Flesh –eating illness", 2014).

According to Inoyori (2014), the mysterious disease news has been linked to the divination of Sadhu SundarSelvaraj who prophesized a horrifying disease to spread globally starting in Pangasinan during the 24th National Prayer Gathering at Cuneta Astrodome in April 2013. The prophecy is as follows:

"The Lord said there is a place called Pangasinan. It is in the northernmost part in your land. From there is a grievous disease will spread all over the world. That will consume the flesh of men; all their upper skin will begin to decay. It will pierce through the bones. The fear of this disease will spread all over the world. The Lord said that this will begin from the Philippines. This then will spread to Cebu".

In a statement posted in the Facebook of Department of Health, Secretary Enrique Ona urged the public not to panic and dispelled the report, that the two victims had psoriasis and leprosy. Ona explained that the patient in Santa Barbara is a 21-year-old female who is on multi-drug therapy for leprosy and developed an adverse reaction to the drugs.Meanwhile, the 19 year old male in Villasis was said to have a severe case of psoriasis, a chronic skin disease of red patches and white scales, Ona added ("DOH chief", 2014).

Dr. Policarpio Manuel, chief of the Pangasinan Provincial Hospital (PPH), said the malewas actually suffering from an acute episode of psoriasis, a genetic, non-contagious disease of the skin--complicated by arthritis while the female of Sta. Barbara town was suffering from leprosy as well as from malnutrition. Dr. Manuel said latter's medical condition was aggravated when her mother insisted on seeing a quack doctor who applied leaves and oil to her daughter's skin, which caused the infection. He maintained that the two patients are non-contagious (Philippine News Agency, 2014c).

Pangasinan provincial health officer Dr. Anna De Guzman also dispelled the news report. She clarified that the two cases were not that of the rare necrotizing fasciitis, a serious bacterial infection that spreads rapidly and destroys the body's soft tissue. She perceived the report only connected the two case studies to a prophecy by a self-titled prophet warning of a flesh-eating disease in Pangasinan "to exaggerate to make the news sensational" (Mysterious flesh-eating disease', 2014).

On March 24, 2014, a month after the news was reportedDr. de Guzman said that the woman from Sta. Barbara town and the man from Villasis who were falsely reported to be suffering from "flesh-eating" bacteria have been discharged from the provincial hospital(Philippine News Agency, 2014b). Subsequently, ABS-CBN has apologized for the report.

Villa (2014) identified this as the latest example of how misinformation can fan paranoia and deepen the suffering of people is found in Pangasinan, where fears that "flesh-eating" bacteria have spread lately. The provincial government's concernis who pays for the damage done as a result of an erroneous report that has caused undue alarm to the province's population of almost 3 million? The better question in this light is what can we learn from this incident? Hence, this study has found its purpose of being.

OBJECTIVES OF THE STUDY

Anchored on the mental noise theory and risk perception theory, the study delves into the perceptions of risk of the affected public as well as determines the risk communication impacts and lessons of the Pangasinan Mysterious Disease.

MATERIALS AND METHODS

Multi-method descriptive research design was used that involves a semi-structured interview guide for the affected public, and content analysis of the news report as well as the succeeding related news reports. Fifty Pangasinan people who were residing in the affected and/or nearby towns of Villasis and Sta. Barbara, Pangasinan were purposively as shown in Table 1.

The inclusion criteria to be included in the purposive sample are: people of Pangasinan, residing in the affected and/or nearby towns of Villasis and Sta. Barbara, Pangasinan, andhave watched the late night newscast of Pangasinan Mysterious Disease in ABS-CBN's Bandila on February 24, 2014. Fifty respondents who have satisfied the inclusion criteria have given informed consent and voluntarily participated in the study.

Table 1. Number of Purposively Selected Residents in the nearby towns of Villasis and Sta. Barbara, Pangasinan

f	Proximity to the affected area	
14	Border of Sta. Barbara	
7	Affected Area	
7	Affected Area	
7	Near Sta. Barbara	
7	Border of Sta. Barbara	
8	Border of Sta. Barbara and Villasis	
50		
	7 7 7 7 8	

To safeguard integrity and ethics of the study, informed consent of the respondents were sought. Moreover, their voluntary participation, the confidentiality of their answers and their anonymity were also ensured in the conduct of the study. Interview questions were carefully crafted and validated by psychologists and counselors and appropriate interview procedures were followed to avoid any harm to participants.

RESULTS AND DISCUSSION

Perceptions on Pangasinan Mysterious Disease News

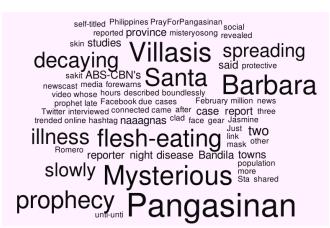


Figure 4. Perceptions on Pangasinan Mysterious Disease News

When the results of the interview focusing on the perceptions on the Pangasinan Mysterious Diseases News to the respondents were thematically analyzed using the lens of Mental Noise Theory, the text visualization in Figure 4shows the emphasis on Sta.

Barbara, Villasis, Pangasinan, mysterious, flesh eating illness, slowly, decaying, spreading and prophecy. The key informants admitted that there a few information that they have retained after the news broadcast. These few information can be summarized into three themes: the place, the disease and the association to prophecy. It is interesting to note that the province of Pangasinan is subdivided into 44 municipalities, and 4 cities and yet the respondents have clearly identified the towns of Sta. Barbara and Villasis as the affected places. Furthermore, they remember the disease as a "mysterious flesh eating disease that slowly decays" the body of the victims. Lastly, the respondents have also committed to memory the association of such mysterious disease to a prophecy.

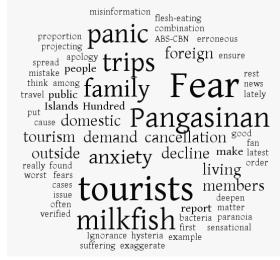


Figure 5.Impacts of Pangasinan Mysterious Disease News

Figure 5 presents the word cloud that shows the emphasis on panic, trips, family, fear, Pangasinan, tourists, and milkfish in the responses of the key informants when asked what are the impacts of the Pangasinan Mysterious Disease News. Respondents revealed that they strongly felt fear and panic living in Pangasinan, especially residing at or near the towns of Sta. Barbara and Villasis with the possibility of being infected with the alleged "mysterious disease". Furthermore, their family members living abroad or living outside the province of Pangasinan were seriously fearful that they communicated such tragic news and hastily advice not to travel or be near the affected towns or be relocated some place other than in Pangasinan. Additionally, the respondents also recounted the cancellation of trips by foreign and domestic tourists to Hundred Islands, Bolinao and Manaoag Church as well as travels of relatives and

friends to Pangasinan as well as the decline on the demand and consumption of milkfish of Dagupan City and rice cakes (puto) of Calasiao City.

The above responses of the key informants were corroborated by subsequent news reports. Visperas (2014) wrote that the province's tourism sector apparently took a beating, with cancellation of bookings. City tourism officer of Alaminos City Mike Sison as cited by Visperas (2014) disclosed that "Their presentation of the report would really scare you" and "his office received phone calls from hotel owners after they got booking cancellations from some groups that planned to visit Alaminos to see the world-famous Hundred Islands". Furthermore, pilgrims going to Manaoag was reported to have been drastically reduced in the weekend after Pangasinan Mysterious Disease news was broadcasted and they also revealed that their friends refused to buy and eat milkfish coming from Pangasinan" (Philippine News Agency, 2014).

Lessons at risk communication on Pangasinan Mysterious Disease News

News plays a critical role in the daily activities and behavior of people, communities and societies. Other than providing information on the latest and breaking news that may cover the entire world to their very own communities, it can evolve into a source of varied actions. inspirations and emotions. With the advancement of information and communication technologies, particularly social media, sensational television news does not end in its broadcast in the living room, but may copiously pervade the social media sites and the World Wide Web within seconds. As the role of media can effect change on society both on social and governmental levels, it is important that media practitioners acknowledge this as a responsibility to report the unbiased, accurate information as it is received from reliable sources as well as anticipate the risk communication impact of the information that they are to impart to the public.

The Pangasinan Mysterious Disease News is news that entails communicating a risk to the public at large and to the affected public. The news per se as well as the perception of the affected public and the review of related literature on risk and crisis communication strategies has provided the following invaluable lessons on publicizing news that carries risk concerns.

Assess the risks of publicizing the news. The benefits of assessment may include identifying risk areas and corresponding risk reduction, anticipating initial crisis responses so that decision making during a crisis is more efficient, and identifying necessary response resources.

Process a risk communication strategy. Communication issues are anticipated immediately and more fully in the process of planning for and responding to a possible impact of putting out news with risk concerns. If communication issues are only considered after the fact the meaning of the crisis has already been framed by others, and communication activities are forced into a catch-up role.

Understand the affected public. Media practitioners managing the risk impact of news must listen to the concerns of the affected public, take these concerns into account, and respond accordingly.

Openness and Partnership with the Public. Openness about risks promote an environment of risk sharing, where the public and agencies mutually accept responsibility for managing a risk.

The public has the right to know what risks it faces. This has specific implications for the timely and accurate communication of information to the public and for the solicitation of concerns and questions from the public.

Collaborate and Coordinate with Credible Sources. There is a need to establish strategic partnerships before a crisis occurs. This collaborative relationship creates a pre-crisis network to coordinate and collaborate with other credible sources. This is to continuously validate sources, choose subject-area experts, and develop relationships with stakeholders at all levels. Coordinating messages enhances the probability of consistent messages and may reduce the confusion the public experiences.

Communicate with Compassion, Concern, and Empathy. In transmitting news that has components of risk with the public, media practitioners should demonstrate appropriate levels of compassion, concern, and empathy.An expression of concern and empathy reframes both the crisis-related message and actions.

Accept Uncertainty and Ambiguity. An additional best practice of crisis communication identified by experts begins with an acknowledgment of the uncertainty and ambiguity inherent in a crisis situation. Risks always include some level of uncertainty. Crises and disasters are, by definition, abnormal, dynamic, and unpredictable events. Overly reassuring statements in the face of an inherently uncertain and equivocal situation may reduce a spokesperson's credibility. In addition, over-reassuring statements that lack credibility may even create higher levels of alarm.

Messages of Self-Efficacy. Messages that provide specific information telling people what they can do to

reduce their harm can help restore some sense of control over an uncertain and threatening situation. These may include recommendations to avoid particular foods, ensure appropriate hygiene, seek specific kinds of medical treatment, or monitor for particular kinds of symptoms or simply encouraging stakeholders to monitor the media for additional developments or what can be done to help others.

CONCLUSIONS

There is but little information that respondents have retained after the news broadcast. These can be summarized into three themes: the affected place, i.e. the towns of Sta. Barbara and Villasis, the disease, i.e., as a "mysterious flesh eating disease that slowly decays" the body of the identified victims and the association to prophecy.

The respondents revealed that they strongly felt fear and panic living in Pangasinan, especially residing at or near the towns of Sta. Barbara and Villasis with the possibility of being infected with the alleged "mysterious disease". Furthermore, their family members living abroad or living outside the province of Pangasinan were considerably anxious that they communicated such tragic news and hastily advice not to travel or be near the affected towns or be relocated some place other than in Pangasinan. Additionally, the respondents also recounted the cancellation of trips by foreign and domestic tourists to Hundred Islands, Bolinao and Manaoag Church as well as travels of relatives and friends to Pangasinan as well as the decline on the demand and consumption of milkfish of Dagupan City and rice cake (puto) of Calasiao City.

The news per se as well as the reception of the affected public and the review of related literature on risk and crisis communication strategies has provided invaluable lessons on publicizing news that carries risk concerns: Assess the risks of publicizing the news; Process a risk communication strategy; Understand the affected public; Openness and Partnership with the Public; Collaborate and Coordinate with Credible Sources; Communicate with Compassion, Concern, and Empathy; Accept Uncertainty and Ambiguity; Provide messages of Self-Efficacy.

RECOMMENDATIONS

As news plays a critical role in the daily activities and behavior of people, communities and societies, such should be assessed if it communicates a risk to the public at large and to the affected public. A further study on the standards or criteria of the determination of the presence of risk and its severity is highly recommended.

should practice Media practitioners the responsibility to report the unbiased, accurate information as it is received from reliable sources as well anticipate the risk communication impact of the information that they are to impart to the public. In case news has been initially assessed that it has risk concerns, media practitioners should process a risk communication strategy, understand the affected public, be open and partner with the public, collaborate and coordinate with credible sources, communicate with compassion, concern, and empathy, accept uncertainty and ambiguity, and provide messages of self-efficacy to the affected public.

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Acknowledgment

The author acknowledged the support of St. Paul University Quezon City, Philippines. This paper has been presented in the 2014 National Conference of Philippine Sociology Society on October 15-18, 2014 at Mindanao State University, General Santos City, Philippines and (Un)Covering Disasters: An International Conference on Disaster Journalism and Risk Communication on July 24-25, 2014 at Ateneo de Manila University, Philippines.