

RISK COMMUNICATION DURING THE SARS EPIDEMIC OF 2003

Case studies of China, Hong Kong, Vietnam and Singapore

(Prepared for the SARSControl Research Programme)

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1. Introduction

This study on risk communication is part of a larger European Commission funded multidisciplinary project that aims to improve public health responses to emerging infectious diseases, using SARS as a case study. The larger project involves a consortium of 17 European, Asian and international partners coordinated by the Erasmus University Medical Centre in Rotterdam, the Netherlands.

The overall project has been divided into the following work packages:

- Risk assessment models
- Chinese data analysis
- Mathematical modeling
- Risk perception
- Risk communication
- Economic analysis
- Policy evaluation

At the end of a 36-month period, the project will deliver a comprehensive set of studies and policy recommendations to the European Commission. The research results of individual work packages are also to be disseminated through publication in scientific journals. Though the SARS epidemic will be the focus of the study, the aim is to use the SARS experience to produce policy recommendations that will be relevant to future epidemics.

The risk communication work package is led by the Journalism and Media Studies Centre at the University of Hong Kong, with the collaboration of the Health Protection Agency of the UK. The work package will look at the risk communication policies and practices in the worst

affected countries, regions and territories in Asia: China, Hong Kong, Taiwan, Vietnam and Singapore, as well as the policies of the World Health Organization and the European Union.

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Objectives of the Study

The Objectives of the Study, as set out by the European Commission are:

- To evaluate risk communication strategies employed by government, health and other professional bodies during the SARS outbreak
- To contribute to policy development at the European and national level on risk communication strategies for new and emergent infectious diseases

Communication and Public Health

The SARS epidemic of 2003 posed well documented public health challenges both in the cities and regions that were directly affected as well as globally. This was a new disease of unknown etiology spreading rapidly through an interconnected world. Both the impact of the disease, as well as the national and global public health efforts that helped to contain the disease have been described elsewhere (Abraham, 2004)

This study examines a vitally important but comparatively neglected area of the public health response to SARS: communicating to the public the information that was required for people to protect themselves from the disease and reduce the risk of transmission.

The use of communication as a public health tool to fight the sudden onslaught of a new infectious disease has been little studied, though the emergence of new infectious diseases has made this an increasingly important area of health communication. The World Health Organization has described this field as outbreak communication, and has set out some of the features that distinguish outbreak communication from health communication at other times, and has also laid down guidelines for effective outbreak communication (WHO, 2005). Risk communication specialists such as Peter Sandman have also laid down guidelines for communicating to the public during public health emergencies (Sandman, 2001).

The importance of effective communication policies and tools were apparent during SARS. Countries that had the means and the ability to provide credible information rapidly to their publics, found it easier to contain the epidemic than countries where communication was slow and ineffective. As the case of China demonstrated, ignorance and lack of information allowed the disease to spread in the early stages of the epidemic.

SARS showed that infectious disease epidemics are not merely public health challenges. They also can also have deep economic, social and political impacts. In the case of SARS Asian economies were estimated to have lost an estimated US\$ 30 billion in production. In Hong Kong, SARS led to political fall out, with the government blamed for poor management of the epidemic, and senior officials having to the step down. In other parts of the world the Chinese community was stigmatized and seen as potential carriers of the disease. These “ripple effects” of the epidemic are linked to the way risk is communicated (Kasperson, Kasperson, Pidgeon, &

Slovic, 2003). A better understanding of risk communication can help mitigate these ripple effects.

This study looks at the public health communication policies adopted by the countries and regions affected by SARS in Asia: China, Taiwan, Hong Kong, Vietnam and Singapore. Through a comparative study, it seeks to record practices that led to effective risk communication, and to identify weaknesses that hindered communication.

The aim of the study is to provide recommendations that will help governments and public health authorities to be armed with appropriate communication policies for future infectious disease outbreaks such as pandemic influenza. With appropriate communication policies, it is hoped that the disease transmission, as well as the economic, social and political ripple effects of the disease can be minimized.

Concepts of Risk Communication

Risk is a complex concept, with little consensus on its meaning (Rosa, 2003). For some, risk is seen as an overarching principle in contemporary society, and a focal point for the fears and anxiety of the post modern world (Lupton, 1999). Sociologists such as Ulrich Beck and Anthony Giddens, for example, view risk and strategies to negotiate and avoid risk as key organizing principles in today's global society (Beck, 1992; Giddens, 1990). Those who view risk in such broad terms tend to see risk as a socially constructed phenomenon, and emphasize the importance of the socio-cultural contexts in which risk is perceived, managed and communicated. At the other end of the spectrum, there are those who view risk in more narrowly technical terms as the probability of an event causing harm, and the consequences of that harm. Risk is seen as having an objective existence, and the main issue facing risk

communication is the transmission of this objective information accurately through the subjective veil through which the lay public views the world.

These different approaches to risk fall broadly into what has been described as the realist, or techno-scientific approach and the social constructionist approach (Lupton, 1999) . The techno-scientific approach looks at risk as the statistically measured probability of an event causing harm. Under this definition risk is seen as the probability of an adverse event, times the consequences of that event.(Rosa, 2003). Lupton points out that debates over risk under this approach tend to revolve around technical issues such as how well the risk has been identified, the science behind identifying a risk, the models used to assess risk and the accuracy of psycho-behavioural studies used to assess how people respond to risk(Lupton, 1999). Most cognitive, psycho-behavioural studies of risk adopt this approach. Risk is seen as an objective phenomenon in the real world, capable of being discerned through scientific studies. The lay public is assumed to see risk more subjectively, either exaggerating or underestimating the “true” scientifically based measure of risk. Risk communication is seen as the search for methods to convey the scientific risk of an even to the public. As William Leiss and Douglas Powell put it, "Problems in communicating about risks originate primarily in the marked differences that exist between the two languages used to describe our experience with risks: the scientific and statistical language of experts on the one hand, and the intuitively grounded language of the public on the other."(Powell & Leiss, 1997)

This “realist” approach has been heavily critiqued by social constructionists, who see the idea of risk as a social and cultural construct, and argue that it is not possible to understand the notion of risk without taking into consideration the larger context within which societies define and negotiate risk. Lupton writes that the realist school

“does not generally take into account the symbolic meanings, created through the social world, that humans give to things and events. Perception is limited to how humans see and understand the world through their senses and brain-functioning, without acknowledging the ways in which cultural conceptual categories mediate judgment.(Lupton, 1999) p22-23.

Social constructionists would see knowledge and perception of risk as something that is socially constructed, and determined by a variety of social and cultural factors. While the realist school begins with the notion that events that are classified as “risk” have an objective reality, social constructionists are divided on this. The so called “weak social constructionists” would accept the existence of objectively existing risk events, others would dismiss this and describe risk as a product of a socially and culturally conditioned way of regarding events.

A study of risk communication during SARS would look at very different aspects of the problem depending on the perspective that is adopted. A techno-scientific approach would tend to look at issues such as the quality of the scientific knowledge that was available about the epidemic, examine the methods that were used to communicate this information, and look at how the public received and acted on this information. A more constructionist approach would examine a variety of broader questions, which might include questions such as how the risk of an infectious disease epidemic in a globalized world was portrayed by different governments and international organizations, how the origins of the disease in southern China was placed within the narrative of an overpopulated China which does not conform to western practices of animal rearing and so on.

The techno-scientific and the social constructionist perspectives on risk have their merits and their weaknesses, and a broad, well rounded examination of risk would need to synthesize elements from these various ways of looking at the problem.

This particular study though was embarked on for very practical reasons: to draw lessons that governments and policy makers will find useful as they prepare to meet the communication challenges of future infectious disease epidemics and pandemics. As such, it will adopt a largely techno-scientific approach, and look at how scientific and medical knowledge about SARS was transmitted to the public during the epidemic. In our conclusions, we will however attempt to outline some of the broader issues of culture, society and politics that need to be addressed in further studies for a fuller understanding of the issue.

Best practices in Risk Communication

After the SARS experience, organizations charged with public health in different parts of the world have begun to focus on the task of refining emergency risk communication strategies. At a global level, the World Health Organization has set out some of the principles and best practices that outbreak risk communication should be based on (WHO, 2005). National organizations such as the US Centers for Disease Control and Prevention (CDC) have developed training tools for emergency risk communication (an overview of the CDC's main training tool, CDCynergy is available at <http://www.bt.cdc.gov/erc/erc.asp>).

The recommendations made by these organizations are based to a large extent on the communication principles developed by Vincent Covello and Peter Sandman in the United States (Covello, D.McCallum, & M.Pavlova, 1989; Sandman & Covello, 2001).

Based on the experience of communication during SARS, as well as earlier infectious diseases such as Nipah and Ebola, the WHO has identified five critical best practices for effective outbreak communication. These are:

- Build Trust
- Announce Early
- Be transparent
- Respect public concerns
- Plan in advance

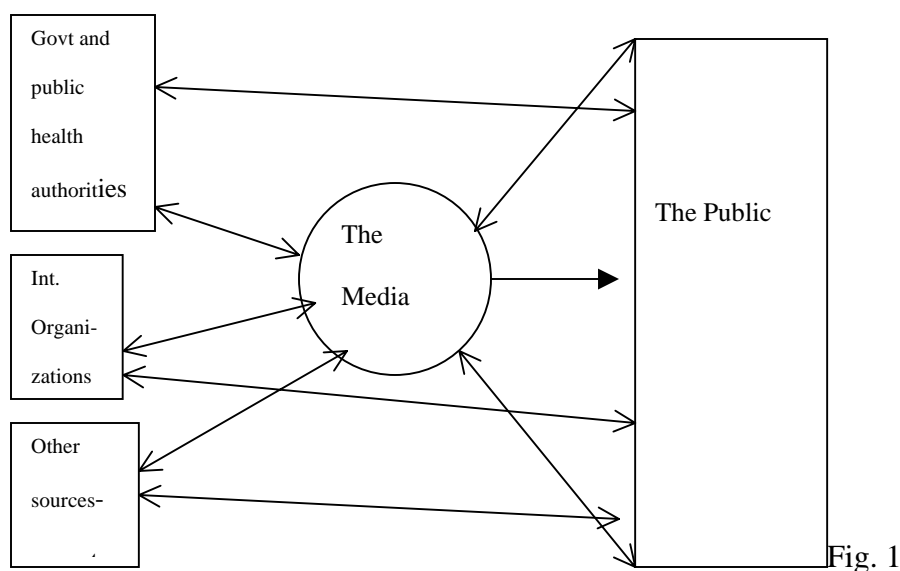
It is noteworthy that public trust in the authorities responsible for managing the epidemic is seen as a crucial factor in efficient communications. If the public trust the authorities, they are more likely to take on board risk messages coming from the government. If on the other hand, there are doubts about the government's competence, or honesty, then messages put out by the government could be disregarded.

Early announcement of epidemics is regarded as important for two reasons: first it contributes to early containment, and secondly it helps the authorities win public confidence. Other guidelines are: announcing an outbreak early, rather than attempting to cover it up, being transparent in communications, respecting public concerns, and planning in advance for outbreak communications. Transparency and a respect for public concerns are also important strategies to win public trust, and eventually public adherence to risk communication messages.

The country studies will examine the extent to which these guidelines were followed during SARS.

Structure of Study

As indicated above, this study will look at risk communication during SARS through a fairly narrow focus, with the aim of arriving at policy recommendations for communication during future infectious disease outbreaks. It will use at its starting point the following flow chart of information about SARS:



The public received information about SARS from three sources: governments and public health authorities, international public health organizations such as the WHO, and non-governmental organizations and individuals.

In all the areas studied, the main source of public information about the disease was from the government and public health authorities. This was supplemented by information from organizations like the WHO, individuals such as doctors, and non governmental organizations such as trade and industry organizations which put out messages to reassure the public and to try and minimize the economic consequences of the epidemic. The exception was in Guangdong province China in early 2003, when the Chinese authorities imposed a ban on media reporting of

the growing number of SARS cases in hospitals in Guangzhou. News of these cases did however get out to the public through SMS messages that were passed on from person to person.

The information that the public received was largely mediated by the news media. Though all three providers of information- local governments, international organizations and non governmental organizations had direct access to the public through web sites and through advertising and public information campaigns, the news media was the main channel through which the public received information.

The news media is not a neutral channel of information. Like risk itself, news has been defined as a socially constructed phenomenon. News gatherers select and transform information into news through a process that is determined by a variety of social, political and institutional factors. In countries where the media is controlled by the government, official decisions on what to publish and what not to publish determine what is considered news. In countries where the media is independent of government control, a journalists use a variety of criteria to determine what is and is not news. Events that are thought to be significant and of interest to readers, that are dramatic, or have elements of conflict are all likely to be considered newsworthy. The way these events are portrayed to readers will also be determined by a variety of factors including the frames through which journalists view these events.

The complexity of the information flow chart is increased by the fact that communication is never a one way process from the authorities to the public. Communication is a dialogue between all the participants involved. The public demands information from the authorities, either through the media or directly. The information that the authorities put out is dependent both on what they see as being essential for the public to know, as well as the demands they receive from the public and the press.

The flow of information also results in changes in public behavior, which in turn affects both the demand for information, as well as the kind of information that is provided. The media play an important middle man role in this dynamic exchange of information, getting information from the authorities that they believe their readers would want to know, and packaging this information in a way they think will appeal to their readers.

This is a complex process, and given the limitations of data, this study will only focus on key part of the part of the process: the communication policies followed by governments, and the messages they put out to the public. Since the aim of the study is to produce practical policy recommendations the study will focus on certain key pre-requisites for communication. In particular, it will examine the barriers to effective communication that existed in different countries and measures to overcome them. The study will answer the following broad questions:

1. Did governments have:

- An institutional structure in place for communicating information to the public rapidly and openly and was this put to use?
- A well thought out plan for crisis communication?
- A philosophy of crisis communication that maximises the transmission of relevant information to the public, and so helps the public to take precautionary measures?

2. What barriers to effective communication existed in different countries?

3. What lessons can be drawn, and what policy recommendations can be made to strengthen communication for future infectious diseases?

Methodology

The aim of the study was to study both the institutional structures within which government communication occurred, as well as the content of communication from governments and public health authorities to the public.

Institutional Structures

To understand the institutional structures of communication government documents and regulations setting out the competencies and responsibilities of different ministries, as well as interviews with government officials were used. In the case of Hong Kong, extensive material was available from two expert committees which were formed post SARS to assess how the governmental and public health machinery had performed during SARS. This was supplemented by personal communication with officials in the Department of Health and the Hospital Authority. In the case of Singapore as well, there was a wealth of published material on both the structure of different government ministries and their roles in crisis communication, and evaluations of how the government structure performed during SARS. In the case of Vietnam as well, there was adequate published information on the structure of health communication and the communication policies that were adopted during SARS. The complexity of the governmental system in China, with its multiplicity of rules and regulations, and its many unwritten rules of procedure proved to be the most difficult to unravel. Published material by government departments on their workings, scholarly studies as well as discussions with those familiar with the Chinese system were relied on to provide an understanding of how the health communication system functioned during SARS.

Content of communication

The second set of data this study was concerned with was the content of government communications. During SARS governments communicated to the public in a variety of ways: through press conferences, through press releases, through advertisements and public service announcements, through posters and so on. It was decided to focus here on government communication through the media, since the mass media was the main source of information to the public during SARS, and the bulk of risk communication during emergencies and crises is done through the media.

News reports of government announcements, press conferences and press releases were collected from all the countries studied for the duration of the SARS epidemic. This content was analyzed for information on the following variables: symptoms/causes of the disease, information on treatment, information on prevention, and information on how serious the epidemic was, based on the number of current cases. These variables were chosen on the assumption that this would be the information that people would be most concerned to have during an emergency: what are the symptoms of the disease, what is the treatment, what preventive measures can people take, and how serious is the epidemic. It is also important for people to get information speedily, and so the timeliness of information given was also assessed.

2. China

Overview of SARS in China

The global SARS epidemic broke out in China in November 2002, and the disease spread to 24 provinces, regions and cities, infecting 5,327 people and taking 348 lives. Beijing with 2,521 cases was the city most affected by SARS. Guangdong province, where the first cases of SARS were reported in November had 1,514 cases and was the second worst hit region in China. The epidemic in Beijing began to subside in mid-May 2003 and on June 24 China was declared to be SARS free.

Both at the provincial and the central level, government officials refused to acknowledge the presence of the disease until it had spread so far that a cover up was no longer possible.

SARS laid open both the strengths and weaknesses of the Chinese governmental system. Though the first cases of this new disease occurred in November 2002, it was only after it spread to the rest of the world that China acknowledged the existence of the disease. SARS exposed the fact that there are significant institutional, political and legal obstacles to successful risk communication in China including a culture of secrecy, a bureaucratic system that is conducive to covering up rather than reporting problems, and an unwillingness to trust the public with information that is essential for the public well being. But once China acknowledged the existence of the disease, and saw the dangers it posed to Chinese society, the government demonstrated its ability to mobilize resources and tackle the disease swiftly.

The following sections will first examine the institutions for health communication in China, the mass media system, the reasons for the initial cover up, and the successes of the later stages when the government decided to tackle the problem head on.

Institutional framework for health communication in China.

According to the “Law on Prevention and Treatment of Infectious Diseases” enacted in 1989, the Ministry of Health (MOH) is the major institution responsible for health risk communication. Section 23 of the law requires the ministry to provide timely and accurate information about epidemics. However, it is not clear that the law allows media reporting, or public dissemination of information without clear permission from the government. The law also empowers the ministry to authorize the health authorities of provinces, autonomous regions, and municipalities to circulate and disseminate information about epidemics within their administrative areas.

In general, information about serious epidemics involving large areas is disseminated to the public through the MOH’s information office. The office was set up in 2002 and is responsible for organizing news conferences and promotional activities for the ministry, and coordinating and planning nationwide health-related propaganda work.

China also has a network for collecting information and reporting epidemics, though there are weaknesses in the surveillance system. Infectious diseases are classified into three categories: category A comprises the most deadly infectious diseases including plague and cholera; category B includes serious infectious disease such as viral hepatitis, bacterial and amoebic dysentery, HIV/AIDS, while category C includes pulmonary tuberculosis, and parasitic diseases such as schistosomiasis and filariasis.

Under Section 21 of the law, health workers and epidemic prevention officers discovering patients, or suspected cases in any of these three categories are required to report them to the local epidemic prevention unit. The local epidemic prevention unit in turn is to report

to the local health administrative authority. The local health authority will report this to the local government, as well as to the health authority at the next level of government. Information about epidemics coming within these categories supposed to be reported up all the way to the Chinese Centre for Disease Control and Prevention (CDC) in Beijing, which turn reports to the Ministry of Health's Prevention and Protection Department, which decides whether the information can be made public through ministry's information office. In serious cases, the Party Central Committee and the State Council need to give approval for information to be made public. (Chen, 2006).

The epidemic surveillance network was put in place in 2001 but only covers areas above county level. Information from areas below the county level is reported through mail or fax which can take a long time. Only classified diseases are required to be reported, and there are no clear criteria or requirement for reporting diseases that cannot be diagnosed. Epidemic information is required to be reported step-by-step through each level of the administration for examination and confirmation. This can take a long time. All of these were disadvantages when it came to an unknown disease like SARS.

Government responses during SARS

The Chinese government's risk communication policy during SARS went through three stages: an initial stage of covering up and denying the existence of the disease, a second stage of admitting the existence of the disease but playing down its severity, and a third stage of openness and public mobilization to fight the disease.

Initial stage (from mid-Nov 2002 to early-Feb 2003)

During this phase, the Guangdong provincial government attempted to solve the problem behind closed doors. On one hand, it sent expert teams to affected areas for investigation. It held emergency meetings with high ranking officials and experts to discuss the situation and work out measures and policies. On the other hand, it kept it secret from the public by withholding important information and suppressing the media in reporting the situation.

The attempts at secrecy did not succeed, as news of the outbreak leaked out on the internet, through mobile phone text messaging, and through brief news items in local newspapers that hinted at the presence of disease.

The few statements made by local officials were all denying the existence of a serious disease. For example, on January , the public health bureau in Heyuan, one of the towns that experienced an early outbreak of SARS, published a statement on the front page of the local newspaper stating that “no epidemic disease is being spread in Heyuan...Symptoms like cough and fever appear due to changing cold weather these days.”

While there was no information released to the public, the health authorities were clearly worried, and teams of experts from Guangdong and Beijing had visited towns where there had been outbreaks to try and find out what this disease was. An early case definition of the disease, as well as clinical guidelines were developed and circulated within the hospital system, though these were never made public(Abraham, 2004).

Second stage (mid-Feb to mid-April 2003)

As cases from outlying towns were transferred to hospitals in Guangzhou, the provincial capital, news about the disease leaked out to the public. This was not unexpected, given that

doctors and health care workers who were bearing the brunt of the battle against the disease were beginning to fall ill, alerting the community at large to the disease. News about the epidemic spread through mobile phone text messages and emails. According to the Guangdong Mobile's statistics, the message of "A killer virus appears in Guangzhou" was transmitted 40 million times in a single day on February 8, with the second day 41 million times and the third day 45 million. Some Chinese websites also started discussing about the "mysterious virus", becoming an alternative information source. Panic buying of disinfectants, masks and Chinese herbal medicines began, and the provincial and city authorities had no choice but to hold a press conference on February 11 in an attempt to calm the public and provide advice on precautionary measures. At the conference, officials acknowledged that the province had been affected by an infectious atypical pneumonia, but said the situation was under control. Patients in hospitals were under effective treatment and some had recovered. The public was advised not to panic and not to believe rumours.

On the same day, the Ministry of Health in Beijing reported to the WHO of an epidemic of acute respiratory syndrome with 300 cases and 5 deaths in Guangdong Province and a team from the ministry was investigating the epidemic.

During this period, the propaganda department of the Guangdong provincial party committee issued, almost on a daily basis, a series of directives, notices, warnings, and "unified official news releases" to the local media organization, trying to keep control of media coverage on the epidemic.

In terms of risk communication, the strategy at this point of time was to try and reassure the public (falsely as it turned out) that the disease was under control, and that there was no

cause for worry. The authorities however provided basic precautionary information to people to protect themselves against respiratory disease.

Mobilization stage (from mid-April 2003)

As the disease spread in Beijing, the gravity of the situation became apparent to the Chinese leadership, and there was a shift in strategy to acknowledge how serious the disease was, and to mobilize the full resources of the government and people to battle the disease. On April 17, President Hu Jintao declared at the meeting of the Communist Party Politburo that “no one was allowed to cover-up the epidemic”. On April 20, the State Council announced the dismissal of the Health Minister and Beijing mayor for downplaying the seriousness of the epidemic in Beijing(Lai, 2004). Deputy Health Minister Gao Qiang announced updated figures about SARS cases in Beijing.

Thereafter, the central government acted decisively. It utilized its administrative control of local cadres, improved gathering of information from localities and disclosure of SARS information and situation, and actively coordinated bureaucracies and localities to combat the disease (Lai, 2004). On April 23, Finance Ministry announced that the central government allocated a \$2 billion Yuan fund for SARS control measures. On April 26, Premier Wen Jiabao announced the setting up of the National SARS control and treatment commander headquarters, pledging to coordinate sources from all over the country to win the battle of SARS.

This policy of openness was matched by a new policy of making information available to the public, both about the scale of the disease, as well as precautionary measures. From April 21 onwards, the Ministry of Health released daily updates about the epidemic nationwide. Local health authorities were required to report updated data to the headquarters every day by a designated time. This was information was to the public mostly through Xinhua News Agency,

CCTV and the Health Ministry's official website. From April 26 and on, Health Ministry's information office held news conference every day at 4 pm which were broadcast live. This arrangement continued until June 24 when Beijing was lifted from the WHO's list of infected areas.

In addition to news, the authorities also launched an information campaign in the mass media on infectious diseases and general health education to help people protect themselves. Local governments, public organizations and corporation launched various kinds of anti-SARS campaigns through their own channels. Pamphlets, leaflets, posts, banners and outdoor ads carrying information about the official policies and measures and the personal precautionary advices to infectious disease were distributed and displayed for public acknowledgement (Chen, 2006). One of the great strengths of the Chinese system, is its ability to carry messages to even the remotest villages through organizations such as the National Population and Family Planning Commission. The Commission, as its name implies, was developed to get family planning messages to every part of the country, and it has an extensive network in urban and rural areas. During SARS, its workers were used to both deliver information leaflets and to perform surveillance work and 85 million family planning workers were mobilised across the country to monitor citizens for symptoms. It also launched a census program and a nationwide reporting system for cross-provincial floating population of SARS, which was considered an effective measure to control the spread of SARS in rural areas.

A case study of Shandong province

Shandong province was commended by the central authorities for having carried out effective information and propaganda work during SARS control, and in order to get a more concrete idea

of the kind of communication policies and strategies adopted in China during the third, or mobilization phase, it is useful to see what exactly this province did.

The communication effort in China, as demonstrated in Shandong, was very much a top down process, with higher levels of government formulating messages that were then passed down. This is in keeping with the Communist Party's style of propaganda messages from the party authorities being transmitted to the masses. Communication about SARS was regarded as propaganda work and was seen as part of the Communist party's wider propaganda work. One of the directives for SARS propaganda work pointed out that "when carrying out the work for promoting SARS prevention and control, the strength in promoting the spirits of the 16th National Congress of Communist Party of China (NCCPC) and the important thought of the "three represents" should also be enhanced."

In Shandong province, a work steering group under the governor was first formed to plan propaganda, or communication materials, and to ensure that public opinion was "correctly directed". News organizations were asked to formulate their own propaganda schemes, and to ensure that material produced by Xinhua, the official news agency, and other central government media organizations were published. News organizations were also asked to start new features pages and columns on SARS, and increase the volume of SARS related news reports. Shandong People's Broadcasting TV launched new sections/columns on SARS prevention and control in two daily news programmes, and introduced information about SARS in other two news feature programmes.

The provincial propaganda department and the provincial health department printed a propaganda outline and distributed to villages, corporations, communities, and schools, to disseminate the precautionary information and increase public awareness. . The units produced

easy to understanding posters and leaflets. Education days and other consultation activities on SARS prevention were launched throughout the province.

The internet was used to create SARS web pages with articles from central and provincial news media and discussion pages and groups.

Content of communication

Until mid April, risk communication about SARS was extremely poor. Information was neither timely, nor comprehensive. The main aim behind communication appeared to be to avoid public panic, rather than give out information that the public required to protect itself from the epidemic. Often the information was incomplete or false. For example, the statement on February 11 by Guangdong provincial authorities that the epidemic was under control was clearly wrong. Data later showed that the epidemic curve was starting to rise at the time this statement was made. Once the decision to communicate openly was made, official spokesmen were able to present the information clearly, using clearly understandable terms and avoiding jargon and technical terms.

Barriers to risk communication

Why did the Chinese authorities at decide to say nothing about the disease, and why was the public informed so late about it? And, importantly for the future, have any changes occurred that will ensure that in information will be made public earlier in future epidemics?

By early February 2003, the Guangdong provincial authorities were worried about this disease, and the provincial government had reported it to the central authorities in Beijing. But they were equally determined to ensure that there was no public knowledge of the disease. The Propaganda Department of the Guangdong Provincial government, began issuing directives to the media not to report the disease. Since the media in China is controlled by the state, news

outlets had little option but to comply. Later, after a decision by the top leadership, the policy changed, and information about SARS was made public, and the media was allowed to report freely on SARS. But this freedom proved to be temporary, and subsequent events have shown that the authorities continue to maintain a tight grip on the flow of information about infectious disease. There are several political and institutional reasons for this.

China is a single party state, where the ruling party and government carefully weighs the economic and political consequences of releasing information about social crises. Maintaining social and political stability and continued rapid economic growth are the guiding principles of the government, and any information that could cause unrest or dissatisfaction is unlikely to be publicized. As one academic at Tsinghua University, Li Xiguang put it in an interview to the Washington Post newspaper, “The Chinese government is very conservative...news such as hijackings or earthquakes are considered to be highly confidential. Officials want to keep stability and there are afraid there will be chaos if people know the truth.”(Pomfret, 2003)

The Chinese political system is not designed for quick and easy release of information unless decided by the highest authorities and this is a significant barrier to risk communication. At the lower levels of bureaucracy and government too, there are inbuilt cultural barriers to reporting disasters or crises. There is a tradition of reporting good news, but not bad news, since officials are worried about being blamed for bad news by their superiors, and their careers suffering as a consequence.

In addition, information about infectious diseases is in practice regarded as a state secret, which cannot be divulged without permission from the highest authorities. Though health matters are not specifically mentioned in the law on State Secrets, though a blanket provision in Article 4(ii) of the law which states that anything that “affects the integrity of the nation’s unity,

solidarity among peoples or social stability” can be brought within the scope of the State Secret’s Law, in effect would allow news of an infectious disease to be considered a state secret. After the SARS epidemic, new regulations were introduced making it compulsory for officials to report information to higher levels, and not hide disease epidemics. However, this does not guarantee that the public will have the same access to information. The presumption that serious epidemics that can cause social disruptions should be considered secret, was a major barrier to releasing information about SARS, and will continue to be a major barrier to the reporting of outbreaks of any new infectious diseases.

In addition to these general barriers to risk communication, at a more specific level the following factors prevented early release of information about SARS.

- The early stages of the epidemic coincided with the Chinese New Year, or Spring Festival, an important time for celebrations and family reunions. The authorities were worried that disseminating information about an unknown disease would affect the atmosphere of the festival, and cause public panic and disrupt social stability.
- The epidemic also coincided with an important leadership transition in China, which was formalized at the meeting of the National Peoples’ Congress in March 2003. The authorities were determined to ensure that bad news, or untoward incidents did not disrupt the meeting.
- The authorities were worried about the economic consequences of letting people know that an epidemic of a serious unknown disease had broken out. This was especially so during the Spring Festival, or Chinese New Year, when people spend large amounts of money on food, travel and shopping. In an interview with

the Washington Post, an official of the Guangdong health department said “You can imagine how people would have reacted if we had told them about the disease. They wouldn’t eat out, nor would they go shopping or get out together with family members and friends. If we had done it earlier, it would have definitely have caused chaos.(Pomfret, 2003)”. In addition, there were worries that the investment climate would be affected if it became known that and infectious disease epidemic and broken out.

3. Hong Kong

Overview of SARS in Hong Kong

Hong Kong is where SARS came into full view of the outside world, after being hidden in southern China since November 2002. Though Hong Kong is part of China, it was kept in as much ignorance of the epidemic that was brewing across the border as the rest of the world. Hong Kong media reported rumors of a mysterious epidemic in neighbouring Guangdong province, but Hong Kong officials were unable to get any information from their counterparts in China (Abraham, 2004).

The index patient for SARS in Hong Kong was a 64-year-old medical professor from Guangzhou who arrived at Hong Kong with his wife on February 21, 2003. He was very sick and admitted to the intensive care unit at Kwong Wah Hospital the next day. The initial diagnosis was of severe pneumonia, but he did not respond to treatment and died on March 4. He was confirmed to have SARS in mid-April.

At least five of his close contacts, including his wife and daughter, a healthcare worker, and his sister and brother-in-law, were later found infected with SARS. The sister and brother in law died . Besides, a cluster of guests and visitors at Hotel Metropole, where the medical professor and his wife stayed, triggered off further chains of infection in Hong Kong and worldwide. It led to the outbreak in the Prince of Wales Hospital in Hong Kong from March 10, and outbreaks in Hanoi, Singapore and Toronto.

The second large scale outbreak occurred around March 26, in which a total of 321 residents in the Amoy Gardens housing estate were affected. At the peak of the epidemic, as many as 80 new cases were reported in one day on March 31. On April 2, the WHO issued a travel advisory warning for Hong Kong.

The situation improved gradually after April 10 with less than 30 new cases per day. On May 23, the WHO lifted the travel advisory warning against Hong Kong. The last probable SARS case was reported on June 11, and as of August 1, there were 1,755 cumulative cases and 299 deaths (*SARS in Hong Kong: From Experience to Action*, 2003).

Communication during SARS

Hong Kong has a well developed health and health communication infrastructure, as well as experience of communicating potentially serious infectious disease events. The first case of human infection of H5N1 was in Hong Kong in 1997, resulting in a mass cull of Hong Kong's chicken. Subsequent human and avian cases of H5N1 in the years that followed have given health communicators experience in communicating these issues, and the media has grown accustomed to reporting them. Hong Kong has an efficient bureaucracy with clear responsibilities assigned to officials in the ministry of health for communication and risk communication

Despite this, SARS caught the government unprepared and its communication machinery was slow to respond to the challenge. The Hong Kong media took the lead in informing the public about the disease that was raging through southern China. The Hong Kong government had no official information to the public, and said nothing. This early failure added to a general public perception that the government was trying to "cover up" SARS, and did not know how to handle the situation.

There were two stages in the Hong Kong government's communication response to SARS: an early stage in which responses were slow, and the Hong Kong government was perceived to be secretive, reactive and not in command (Mustain, 2004). After the first few

weeks though, government's communication strategy fell into place, and a previously hostile media and public, began to perceive that the government was doing all it could to fight the epidemic (Mustain, 2004)

From March 13, the day after the WHO issued its global alert on SARS, the government began daily press briefings and press releases to inform the public about the course of the disease. The Secretary for Health, Welfare and Food, the senior most civil servant in charge of Health, addressed the press conferences initially, to be replaced later by one of his subordinates, the Director of Health. A press release was issued after each briefing.

To reach a larger audience, two health education hotlines were set up to advise the public, and posters pamphlets, fact sheets, newsletters and bulletins were printed and widely distributed. Television was widely used and the government information services department and the public broadcaster Radio Television Hong Kong (RTHK) produced 14 promotional videos which were broadcast on 13 channels, amounting to approximately 34 hours of air time. In addition, the Department of Information also launched a SARS information website.

The Hospital Authority, the body charged with managing Hong Kong's public hospital network, also has its own communication network, and between mid March and mid June, it put out daily press released on patient statistics, organized community forums, press interviews, and participated in radio phone in programmes, a popular way for the public and the health authorities to interact.

The two phases of communication

1. The Early Phase

The early phase of government communication about SARS was characterized by a widespread perception of poor communication and a lack of transparency. Part of this was due to

a failure to put implement pre-existing crisis management and communication strategies (*SARS in Hong Kong: From Experience to Action*, 2003). The government was reluctant initially to publicly acknowledge the seriousness of the problem when the first hospital outbreak occurred at the Prince of Wales Hospital. Dr E.K Yeoh, the Secretary for Health, who was the lead spokesman on SARS at this stage, maintained there was no evidence to show that there was a community wide outbreak of SARS. Doctors who were battling the disease at the Prince of Wales hospital disagreed. If one went strictly by epidemiological data, the government's position was correct: the figures for atypical pneumonias (which was how SARS was described at the time) did not register any significant increase over normal levels. But it was also clear that there was a disease brewing in the community that was not yet being reflected in figures. The government's credibility took a major blow when a respected professor who had been treating patients at the Prince of Wales hospital made an emotional public appeal to the government through the press to acknowledge the fact that this disease had to have spread to the community, since the relatives of hospital workers were beginning to fall ill.

Government communication at this point of time was characterized by several of the errors that risk communication specialists warn against, particularly a tendency to over-reassure and to dismiss public fears. When the public was worried about reports of a mysterious disease in southern China, Dr Yeoh replied that the "message to citizens here should be that you should not be overly concerned." He went on to stress that many of the cases in Guangdong were mild and that there was no need for people to worry and panic (Mustain, 2004). All this information turned out to be completely wrong (though it was based on whatever information the Hong Kong authorities were getting from their Chinese counterparts), and this helped to erode the trust in the government.

Similarly, when delivering news of the outbreak of SARS in the Prince of Wales Hospital, Dr Yeoh assured the public that there was no cause for worry, and that “With our effective surveillance system and high quality medical and public health services, the Hong Kong public and overseas travelers can rest assured that Hong Kong is a safe place (Mustain, 2004).

Besides the fact that these reassurances were later proved to be false, they were also contradicted by other medical professionals and international organizations. For example at the same time that the Hong Kong government was reassuring the public about the outbreak at the Prince of Wales Hospital, the WHO’s spokesman was describing it as an extremely serious event.

It should be noted that the Hong Kong government’s overall credibility and standing were extremely low in the public mind. A series of events, including a prolonged slump in the property market, and worries about Hong Kong’s freedom being eroded, had led to trust in the government plunging to extremely low levels. There was widespread belief in the public and the media that the government was incompetent, and SARS was seen as an example of government incompetence. The combination of a poor communication strategy, and a general lack of credibility was a potent mixture that ensured that government communication on SARS would be received poorly.

2. The Later Phase

It speaks greatly of the professionalism and competence contained within the Hong Kong government, that it was able to bounce back from these early disasters. Dr Yeoh, conscious of the fact that the government’s credibility was low, took to inviting respected professors from the two medical faculties in Hong Kong to appear with him at press conferences. Also, once SARS

had been identified as a disease, and become a global priority and the uncertainties surrounding the disease were gradually resolved, communication became easier.

A new spokesperson, Dr Margaret Chan, the then Director of Health, took over the daily media briefings, and achieved greater success. Unlike the earlier phase, the government did not make any attempt to conceal its own fears, or hide the gravity of what was happening. When an outbreak broke out at the Amoy Garden housing estate, government spokesmen were open about the figures and the risk this new outbreak represented.

In addition, Hong Kong being an open society, experts were also interviewed frequently, and as the government became more open, the differences between what experts were saying and what the authorities were saying diminished, helping to increase public trust in government messages.

In this second phase, consistent messages were also put out about how to use face masks, hand washing, disinfection, avoiding visiting crowded places and so on. Community organisations also helped through campaigns to distribute face masks and producing posters about SARS.

Knowledge of SARS and adoption of precautionary measures

The real test of success of communication campaigns are the extent to which public knowledge about the disease increases, and the precautionary measures adopted. By both these criteria, Hong Kong's risk communication efforts can be deemed to be successful. Three studies based on surveys conducted at the time all showed high levels of knowledge about SARS and high levels of adoption of precautionary measures (Lau, Yang, Tsui, & Kim, 2003; Leung, Quah, Ho, & Ho, 2004; Leung et al., 2003). The only gaps in knowledge were about the possibility that

SARS could be transmitted through fomites, and a fairly large number believed that the virus could be transmitted airborne as well as through droplets (Leung et al., 2003).

It was a measure of Hong Kong's overall success in risk communication that survey data showed that while there was great public distress and anxiety about SARS, there was no widespread public panic, even at a time when the numbers of cases kept rising. Few who reported that they intended to avoid work, or leave Hong Kong (Lau, Yang, Tsui, & Kim, 2003)

4. Singapore

Overview of SARS in Singapore

The first cases of SARS arrived in Singapore in late February 2003 when three Singaporean women returned from a trip to Hong Kong. Upon their return, they developed fever, and other atypical pneumonia-like symptoms. Among them, 23-year-old Esther Mok, who was later identified as an index patient, was admitted to Tan Tock Seng Hospital (TTSH) on March 1. Since the highly infectious nature of the disease was not recognized at the time she was admitted, Mok was treated in an open ward with no infection control precautions, resulting in an initial cluster of at least 20 cases of infection in the hospital, including healthcare workers, ward patients, visitors, and family members. The disease subsequently spread to four other healthcare institutions and a wholesale vegetable market.

During her visit in Hong Kong between February 20 and 25, Mok, as well as the other two women were guests on the same ninth floor of Hotel Metropole as the Chinese medical professor who had been ill with SARS. The two other women also fell sick after returning home and were admitted to TTSH and Singapore General Hospital (SGH), respectively. Both recovered quickly without infecting others.

With quick response and stringent infection control measures in TTSH and with other hospitals being informed of the outbreak, no additional nosocomial cases were observed after March 22 in TTSH (the date when TTSH was designated the only SARS receiving hospital) and after April 17 in other hospitals. When Singapore was removed from the WHO's list of SARS-

affected countries on May 30, the city-state with a population of 4.2 million reported 238 SARS cases with 33 deaths.

Government Response to SARS

Singapore, as a small city state surrounded by often hostile neighbours, has made crisis planning a major plank of government policy. The government is also alert to any global event that could adversely affect Singapore. The possibility of an infectious disease epidemic hitting the city state hit the radar screen of government planners as early as 1984, when an outbreak of bubonic plague erupted in Surat, India. The presence of an ethnic Indian minority in Singapore, as well as the social, cultural and business links between Singapore and India, led planners to consider scenarios where travelers from India could bring the plague to Singapore. Since then it has continued to plan for possible emergencies caused by diseases. When SARS hit Singapore, it was probably the best prepared in terms of an institutional framework to respond to emergencies of any of the countries that SARS affected.

Early responses

The highest levels of government took the lead in confronting SARS at a very early stage.

- On March 15, the Prime Minister set up a task force of three ministers under the Health Minister to monitor the SARS situation and take prompt actions.
- On March 17, the Minister of Health amended the Infectious Disease Act to include SARS on the lists of scheduled infectious diseases, which allowed information to be disclosed by the authorities to enable taking steps to prevent the spread of the disease.
- On April 4, the Prime Minister convened the Executive Group of relevant permanent secretaries—an existing framework which manages civil emergencies.

- On April 6, SARS was declared a national crisis. A Ministerial Committee on SARS chaired by the Minister of Home Affairs Minister was set up. The committee, which served as the main forum for strategic decision making, directed the Executive Group to oversee the crisis and to support the Ministry of Health to coordinate the broader response involving all the ministries and public sector agencies. The EG was supported by sub-groups taking care of areas like transport, housing and the economy, giving coherence to the leadership structure and helping ensure inter-ministry cooperation. The Ministry of Health oversaw the medical and public health measures to “confront and prevent” the spread of the disease (Chua, 2004).

Communication during SARS

During the initial period of the epidemic, public communication was largely through press releases and media coverage of the epidemic. About a month into the epidemic, as more about the infection became known and with more control measures being put in place, an intensive public education campaign utilizing multiple channels was launched in schools and through mass media between April 30 and May 13. A comprehensive communications strategy was developed to mobilize community resources and to educate people on SARS and the appropriate behaviours to prevent the spread of the disease (Deurenberg-Yap et al., 2005)

Singapore used a variety of tools, communicators and content messages to get its messages about SARS across to the public. In a speech in September 2004 to a World Health Organization meeting on outbreak communications, Singapore’s Minister of Health, Dr. Balaji Sadasivan, set out Singapore’s strategy as follows (Sadasivan, 2004).

Communication Tools:

- The Ministry of Health held media conferences every evening to update the media. The conference had no time limit and the officials answered every question the media asked. If they did not have the answer to a question, they told they would try and provide the answer at the next conference.
- The Ministry of Health instituted a policy of releasing daily press statements to update the public on the status of the outbreak. TV, radio and print journalists converted the information from the media conference and the press release into news items that the public could comprehend.
- The journalists' questions reflected the concern of the public. By answering their questions, the government was made accountable to the public and this enhanced people's trust and confidence in the ministry's control measures.
- Dialogue sessions were provided to explain the outbreak to various groups including foreign missions, banks, businesses, industry, associations and community groups.
- TV and radio carried SARS education items, talk shows and SARS news. SARS rap and SARS song were featured prominently on TV. Newspapers and posters carried the same news in different creative ways like the use of cartoons.
- A dedicated SARS TV channel a regularly updated official SARS website and a SARS hotline for public enquiries were set up.
- SARS websites and the internet were created to communicate with the public.

The communicators:

Everyone who was in a position to communicate was involved. They included ministers, community leaders and grass-root leaders. The Prime Minister led the way to rally the population

through an open letter to the public, press conference to launch the SARS combat team and televised dialogue sessions. The parliament debate to pass legislation to help control SARS was telecast live and MPs through the parliamentary debate expressed the emotion of the people and their determination to overcome SARS. Grassroots leaders also went door to door to talk especially with elderly citizens.

Content of Communication:

A major focus of communication was to explain to the public in simple, understandable terms what SARS was about, what precautions needed to be taken, and what the latest developments in fighting the disease were. Communicators quickly realized that terms like incubation periods had to be explained in simple terms that anyone with a basic primary school education would be able to comprehend. The Health Promotion Board, a government body charged improving standards of health in Singapore, launched a national public education campaign and produced easy to understand posters and pamphlets setting out the essential features of the disease and the precautions to be taken. A pamphlet providing basic information about SARS, the symptoms, and precautions to be taken was distributed to every household in Singapore.

Television, radio, press advertisements, posters and resource materials were used to educate the public. The Singapore government was also pragmatic enough to temporarily put aside policies that hindered SARS communication. For example, when it was discovered that elderly ethnic Chinese were not able to fully understand government announcements and materials put out in Mandarin, the official version of Chinese in Singapore, the government decided to produce materials in the Chinese dialects that would be understood by the target

audience, even though government policy was to discourage all use of Chinese dialects and promote the use of Mandarin Chinese.

Celebrities and politicians alike went on air spreading anti-SARS messages in dialects. The ministry helped select an easy-to-remember number for the Ministry of Health's SARS hotline—1 800-333-9999, which sounded like “SARS help” in Hokkien and Cantonese (two Chinese dialects). Humorous elements were used in delivering information, with wags saying that SARS stood for “Singaporeans Are Really Scared”, drinking a soft drink named Sarsi to vanquish SARS as “Sar-si” sounds like “kill SARS” in Hokkien, and members of the ministerial anti-SARS team displaying cans of this soft drink at a press briefing (Chua, 2004).

Obtaining feed back

One of the notable features of Singapore's communication effort were constant surveys and polls of public opinion and public knowledge of SARS to ensure that the communication messages that were being put out were getting through to the public. Polls were held weekly by the Ministry of Information, Communication and Arts (MICA) and the findings were fed back into the communication effort (Menon & Goh, 2005).

Risk communication dilemmas

Officials in Singapore juggled with problem of balancing the twin policies of being truthful and realistic with the public about the seriousness of the epidemic, and the need to ensure that people were not paralyzed with fear to an extent that daily life came to a standstill. So along with messages that SARS needed to be taken seriously, messages were also put out that people should continue to lead their normal lives, and keep shopping and eating out. A “Singapore OK” campaign was launched to encourage Singaporeans to keep doing the things they normally did. Ministers ate well publicized meals at hawker stalls and efforts were made to

try and keep tourists coming into Singapore. Inevitably, there were contradictions in the messages being put out. People were encouraged to go shopping, but also told to avoid crowded places. While quarantines were imposed on foreign workers and students coming from SARS affected countries, tourists from these countries were encouraged to keep visiting Singapore (Menon & Goh, 2005). The dilemma of trying to keep economic activity going while ensuring SARS did not spread, was faced by all the countries and regions that were affected by SARS, and will be a factor in any new epidemic as well. Singapore tried to solve the problem through publicity campaigns that urged the public to be vigilant for any symptoms of the disease, but to go ahead with their normal lives if they were symptom free.

How effective was Singapore's communication strategy?

Singapore played by the risk communication rule book in its communication about SARS. Peter Sandman and Jody Lanard, the well known risk communication consultants declared that "Singapore has done state-of-the-art risk communication", and followed the risk communication precepts of avoiding over reassurance and acknowledging uncertainties and public fears (Lanard & Sandman, 2003). But despite the impressive information campaign, surveys showed that overall knowledge about SARS and control measures was low. In a survey by Deurenberg-Yap and collaborators, 835 adults scored a mean of 25 percent on overall knowledge of SARS and control measures. The mean percent score for knowledge about the symptoms of SARS was 40 percent (+/- Standard deviation 15%) (Deurenberg-Yap et al., 2005). In another survey of 1,201 adults, only 20.7 percent could answer three out of three questions testing knowledge of SARS correctly (Quah & Lee, 2004).

Both surveys however found a high level of confidence in and approval of the measures being taken by the authorities. More than 93 percent of adult Singaporeans indicated they were satisfied, or very satisfied with the government's handling of the situation, and 82 percent expressed confidence in the measures taken at Tan Tock Seng Hospital, the main hospital in Singapore treating SARS cases. This was despite the fact that only 20 percent (+/- 16 percent) actually had any knowledge of the measures the hospital had taken (Deurenberg-Yap et al., 2005).

Significantly, anxiety levels about SARS were low, with 54.7 percent scoring low on a clinical anxiety scale. The low anxiety was matched with fairly active practice of preventive measures, with nearly 62 percent indicating they practiced a list of eight preventive measures always, or most of the time, in the three days preceding the date they were surveyed (Quah & Lee, 2004).

The combination of low levels of knowledge, low levels of anxiety, yet relatively high levels of compliance with preventive measures is unusual, and has been explained through the high level of confidence that Singaporeans have in their government doing the right thing. The concept of social trust, or the assigning of responsibility for particular tasks to various agencies also appeared to be at work. Duereberger-Yap comments "It was clear that social trust was rampant during the SARS crisis in Singapore" and suggests that because of the nature of the government in Singapore "Singaporeans need very little information in order to feel confident to cope with SARS, or they do not see the need to know all the control measures before feeling confident with what the government is doing to handle the SARS crisis.(Deurenberg-Yap et al., 2005) . The study by Quah and Lee, also found the absence of a strong correlation between knowledge and preventive behaviour (Quah & Lee, 2004).

These findings from Singapore hint at a paradox: levels of social trust and confidence in the competence of the authorities might in some circumstances be more important in triggering behavioural changes in the public than the actual information about the disease that the authorities provide. Or, put in another way, it could be hypothesized the higher the level of confidence in the authorities, the lower the level of actual information that people require in order to take preventive action. In other societies, the level of information and knowledge required might be higher to trigger similar action.

5. Vietnam

Overview of SARS in Vietnam

The index case for SARS in Vietnam arrived from Hong Kong on February 23rd, 2003. He had been staying in Hotel Metropole in Hong Kong where he contracted the virus. He was admitted to the French hospital in Hanoi on the 26th of February. In the week following this first SARS case, an explosive outbreak of a serious respiratory illness occurred amongst hospital health staff, other patients, their relatives and visitors. Subsequent chains of transmission sustained the epidemic for a further five weeks.

A total of 63 and five deaths were reported. Over 80 percent of the cases were from 8 districts of Hanoi city, and the rest from other provinces. All of the sufferers were either healthcare workers or patients' relatives having spent time in the hospital. The index case hospitalized at the French Hospital can be regarded therefore as the transmission source of the SARS outbreak in Vietnam.

Vietnam's handling of SARS has been widely regarded as a success story. Once it was alerted to the presence of a strange disease by the WHO office in Vietnam and after it was convinced of its seriousness, the government made it a priority to fight it. As the vice minister of Health, Nguyen Van Thuong, put it, the Vietnam government treated SARS as a political challenge, and mobilized all its resources to fight it. It felt no need to hide either the presence, or the extent of the disease from either its own people, or the outside world.

Vietnam, like China, is a one party state led by a communist party. But unlike China, Vietnam was transparent about the disease, and worked with the international community to contain it. The first news reports about SARS came on March 11, two days after a meeting at

which the WHO alerted the Ministry of Health about the news disease. On March 13, the Vice Minister of Health spoke to a local newspaper about the disease, indicating that it was of unknown origin, and on March 14, the Prime Minister went on national TV to acknowledge the disease and announce that an inter-ministerial steering committee had been formed to contain it.

A key feature of the fight against SARS in Vietnam was that it was quickly recognized as a high priority challenge for the government, and a coordination mechanism was rapidly established to bring in different government ministries at the central level to fight SARS. This coordination was replicated at the provincial and local levels as well. Vietnam's modern history has left it with a governmental structure that is used to coping with emergencies and adversity, and this experience helped to put together a rapid and efficient response to SARS.

Institutional Structure for Communication and responses:

The Ministry of Health of Vietnam (MOH) is the agency responsible for risk communication on SARS, and on March 13 it established a task force on SARS under a Vice Minister of Health. A National Steering Committee for the Prevention and Control of SARS was established under the Chairmanship of the Minister of Health and provincial SARS Steering Committees were also established in all 61 provinces.

Vietnam was well prepared in that it had a generic plan for the prevention and treatment of epidemics, and used this as a basis for action when SARS broke out. Vietnam also had a system of health communication spokesmen and women, generally high-ranking health officers from the Ministry of Health. The spokesmen for health communication in Vietnam during SARS period included the Minister of Health, the Vice Minister of Health and the Director of the Central Epidemiology Department, all of whom regularly appeared on television and at press briefings to answer questions and provide information about SARS.

The Steering Committee that had been set up to handle SARS used to hold press briefings every afternoon at 4 p. m, but in addition to this, spokesmen were regularly available to respond to media questions.

The media in Vietnam is government controlled, and major news organizations such as the Vietnam News Agency and the official party newspaper Nhan Dan, were represented on the government committees in charge of communication and public education about SARS. TV and newspapers played the key role in the communicating about SARS to the public. Television spots providing SARS information prevention methods were broadcast on national TV several times a day. Newspapers and journals carried reports on the epidemic as well as information on prevention and treatment.

A special feature of communication in Vietnam was the use of public loudspeakers to broadcast information and education programs on SARS, extending the reach of television and radio programmes. Pamphlets and leaflets were also used extensively to convey information about symptoms and preventive measures.

Like China, Vietnam too has the ability to mobilize people effectively. In the case of SARS, party committees at the provincial level was able to mobilize youth volunteers to spread SARS information messages. The army too was used to spread information.

Assessment

The Vietnam government's communication policy on SARS was based on a policy that emphasized getting information out to the public as quickly as possible. There were glitches, and early information was not always accurate. For example, in its early announcements, the Ministry of Health described the disease as probably being a kind of influenza B virus, adding that more tests were required before confirmation. However, it is commendable that this

information, even though proved subsequently inaccurate, was put out quickly with the proviso that further confirmation was required. While there is no evidence that Vietnamese officials were aware of the latest western risk communication principles, they instinctively took the route of openness and transparency. The logic behind this appeared to be that the disease could only be fought if the public was mobilized, and public mobilization required effective and open communication.

One difficulty in assessing risk communication performance in Vietnam, is a shortage of data on risk perceptions and on public knowledge of SARS and compliance with preventive measures. This makes it difficult to give a deeper assessment of the success and failures of government policies.

6. Conclusions and Recommendations

Overall assessment of risk communication policies

The outbreak of an unknown disease spreading rapidly in hospitals and the general population, poses incredible challenges for any government or organization. Given the scale and gravity of the crisis, governments in the region on the whole responded rapidly to the challenge of providing the public with the information that they needed to fight the disease. The only exception was China, where for a considerable period after the disease broke out, the authorities failed to provide either their own people or the outside world with information on the disease, causing great harm both to China and the countries to which SARS spread. However, even in the case of China, once the decision was taken to communicate openly, information was provided clearly and efficiently to the public. Before putting forward specific recommendations, the following sections will discuss two dilemmas that are involved in infectious disease risk communication, before making specific recommendations.

The dilemma of communicating when there is little knowledge of the disease

Hong Kong and Vietnam faced this dilemma with the first cases of SARS, before the WHO had identified it as an unknown disease. There was initial confusion about what to announce to the public, and when to do so. It was not known whether this was in fact a new disease, or merely an unusual form of pneumonia posing a limited risk to the public. In Hong Kong, this led to early confusion and poor communication with the public, where officials were unsure about the nature of the disease, and played down its significance. Similarly in Vietnam, the authorities needed to be convinced by the WHO authorities in Hanoi that the outbreak they

were seeing was something out of the ordinary and that urgent action was required. (WHO, 2006).

In all cases where the nature of the disease is not clear, there will be confusion about what information to give to the public, and what advice to give. Communicators will also be worried about whether giving information to the public in a situation where they themselves are uncertain about what is happening, will cause public anxiety or even panic. There will be worries about giving out information about which they authorities are not completely certain. These are genuine and serious dilemmas. Any new infectious disease outbreak will pose the same dilemma: how much do you tell the public about something you do not know very much about? The experience of SARS indicates that it is better to communicate early, even if there are uncertainties, and pass on whatever information that the authorities have to the public. Early dissemination of information, even if incomplete and surrounded by uncertainty, can check the spread of rumours and increase public confidence and trust in the health authorities.

The dilemma of balancing public health and economic interests

All the countries that experienced SARS faced the dilemma of trying to keep normal economic activity going, while at the same time asking people to take precautions against getting the disease. Travel, tourism, restaurants and the retail sector were all affected as people tended to stay at home to minimize their risk of contracting the disease. The authorities will often find themselves having to put out two kinds of contradictory messages. On the one hand, there will be pressure to send out messages of normalcy, urging people to continue with their lives, urging tourists and business people to keep visiting, urging foreign countries not to place travel restrictions, or bans on imports of products from affected countries. On the other hand, there will be the need to put out messages emphasizing to the public the seriousness of the disease, and the

measures they need to take to prevent further spread. It is important to find ways to balance these two messages in a way that the public health aspects do not get diluted. The SARS experience has shown that while disease will have a short term impact on economic activity, the economy will bounce back quickly once the epidemic dies down. The priority should be on ending the epidemic as quickly as possible, even with measures that might hurt economic activity and livelihoods, rather than taking milder measures that protect economic activity, but slows down efforts to control the epidemic.

Recommendations

It is important that when the next infectious disease epidemic comes along, whether it is a widely expected pandemic influenza or another disease, that weaknesses be addressed and communication can be used as an effective tool for public health. Based on the experiences of the Asian countries studied, it is believed the following recommendations will help communication to be used effectively.

1. Build commitment at the highest political levels within countries for early and open communication. This is particularly important in countries and regions which do not have a tradition of open communication between government and public. It is only with the support of the highest political authorities that open communication will be possible, and it is important to secure this in advance. Here, the international community will have a role to play in encouraging countries to adopt open communication policies through dialogue and discussions on the benefits of such policies. Open communication about diseases is often difficult for governments, which fear the economic and political costs that might flow from such disclosure. There are examples from across the world to demonstrate this reluctance to communicate, from BSE in the United Kingdom to SARS

in China. But as SARS demonstrated, diseases spread through lack of knowledge, and there is a high cost both to nations and to the international community in lack of early disclosure. It is important that governments across the world agree that they have an obligation to community rapidly about diseases.

2. Building an infrastructure for efficient communication and ensuring adequate resources for communication. Though all the countries and regions that were affected by SARS had effective mass communication networks, poorer countries will need help to strengthen their communication channels.
3. Ensuring regional and international coordination between health communicators. In today's age of global news flows, people in one country are aware of what is happening in other countries, and if there are significant differences in messages being put out in different countries, this could lead to questions from the public.
4. Training programmes for health communicators. SARS exposed the challenges for both health communicators and journalists of explaining an unknown disease to an anxious public. There is a great deal of experience now available in the countries that faced SARS on the challenges faced by communicators, and the success and failures of their strategies. It is important to tap this expertise, and it is recommended that a training programmes and seminars be conducted to help disseminate some of this experience. Also, given that the mass media is the most effective way to get messages to large audiences, it is important that spokespeople be trained to work with the media and use the media to deliver messages.
5. Training programmes for the media. Journalists too found the requirements of reporting on SARS challenging. Given the lack of specialised health reporters in the region, many

reporters who had never reported on health issues before found themselves reporting on a major infectious disease epidemic. Many journalists were unfamiliar with medical and technical terms that experts used, and where there were differing opinions and view points, were unable to synthesis information in a way that readers could comprehend. Training programmes to familiarise journalists with basic concepts in epidemiology and public health should help ensure better quality media reporting.

6. Ensure that communications plans are place as soon as possible, given the unpredictability of infectious disease epidemics. These plans should include channels of communication to be used, templates for messages, and designated spokesmen to brief the press.
7. It is important to test the efficacy of messages, and put in place feedback mechanisms to see whether the messages that are being put out are getting through to the public clearly. If messages are not getting through effectively or are being misinterpreted, then mechanisms should be in place to fine tune messages.

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