Chapter 12
Preparation Without Panic: A Comprehensive Social Marketing Approach to Planning for a Potential Pandemic

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1 Introduction

1.1 Avian Influenza

The first outbreak of human disease from Avian influenza A (H₅N₁) was reported in 1997 in Hong Kong (Yuen et al. 1998). In late 2003 human cases began to be confirmed across Asia and Africa, and the virus increasingly captured the world’s
attention – largely because influenza A is the only strain that has ever been shown to have the capacity to cause a pandemic (Sellwood et al. 2007).

H5N1 can be spread by migratory birds and mechanical means (e.g., from one farm to another on the soil captured by tractor tyres), it can be transmitted from birds to mammals (including pigs, seals, whales, mink, ferrets, tigers, leopards, stone marten and domestic cats), and it can be transmitted from birds to humans (Alexander 2000; Hien et al. 2004). However, in May 2006, the discovery of H5N1 infection within an extended family in north Sumatra presented the possibility of the first human-to-human transmission of the virus (Butler 2006).

With more incident reports of the virus infecting humans, H5N1 began to be categorised as a global public health threat. Concern about a possible pandemic was based on a number of factors. First, given the wide-ranging flight paths of migratory birds, the virus had the potential to be spread to domestic poultry in a number of countries. Second, there was concern that the H5N1 virus could mutate rapidly when it existed within a large contained domestic flock. Third, the close contact that occurs in many Asian countries between humans and domestic poultry provided numerous opportunities for the virus to infect humans through direct contact with infected poultry or surfaces that had been contaminated by infected birds. Fourth, the lack of a vaccine combined with the lack of natural immunity to H5N1 amongst the world’s population created the opportunity for a pandemic to occur. Fifth, the avian influenza outbreak in north Sumatra raised significant concerns about whether countries were prepared to respond to an avian influenza outbreak and capable of doing so in a manner that results in the control of local outbreaks (Butler 2006).

1.2 A Challenge for Social Marketing?

While it is clear that the outcomes needed to address a potential bird flu pandemic can be achieved by effective social marketing (i.e., the outcomes involve voluntary behaviour change), the disease itself is fundamentally different to the majority of conditions to which social marketing has been applied. For example, Kotler’s list of 50 major issues that social marketing can benefit includes 22 issues for improved health, 20 of which relate to chronic conditions such as tobacco use, physical inactivity, and dietary intake), but only two relate to communicable diseases and both of these have simple and proven preventive strategies (i.e., immunisation and the use of condoms) (Kotler et al. 2002). We argue, however, that social marketing is central to efforts to control a potential bird flu pandemic for the reasons noted below.

- **We are selling a behaviour**: The most effective tools currently available for reducing mortality and morbidity from a pandemic are basic hygiene and self-protection behaviours. In the case of bird flu an additional set of behaviours could relate to domestic poultry farmers and industries; in the event of an outbreak, there would need to be an immediate identification and culling of infected birds.
- **The behaviour change is voluntary**: The nature of these behaviours is such that the decision to engage, or not engage, in the behaviour is entirely voluntary.
While there are some measures that could require policy changes or legal sanctions (such as closure of schools or increased quarantine procedures), most of the effective measures currently available are those for which it would not be possible to impose, or apply, the force of law – such as hand washing and the use of disposable tissues.

- **The beneficiary is the individual, group, or society:** In the case of a bird flu pandemic, the beneficiaries of an individual’s behaviour change include the individuals themselves (engaging in personal protection reduces their risk of contracting the disease), their families and social groups, and the population as a whole (by reducing potential sources of transmission).

- **Exchange with the consumer is essential:** In order to persuade individuals to engage in this voluntary behaviour change – particularly as many of the behaviours are effortful or are socially or psychologically challenging – we need to persuade consumers that the personal benefits of engaging in these behaviours exceed the perceived personal costs.

- **A consumer orientation is needed:** As with any social marketing program, the application of a consumer orientation is fundamental to the success of the behaviour change effort. In order to develop appropriate communication strategies, we need to fully understand the target audiences’ knowledge, beliefs, attitudes, concerns and current behaviours. This can only be achieved by extensive and appropriate market research with the different target audiences.

- **There is a need to select and influence the target audience:** Market segmentation is a key component of effective social marketing, as we know that different market segments and different needs and will respond to different appeals. In the case of a potential pandemic such as bird flu, it is obviously important to target the entire population; however, some segments will be seen to be of higher priority (e.g., health care workers, international travellers, persons in low income housing units, domestic poultry farmers) and different strategies will need to be used to ensure we reach, and persuade, all groups within the population.

- **There is a need to incorporate all 4Ps of the marketing mix:** An effective strategy to engage the population in the appropriate responses to reduce the impact of a pandemic requires a careful consideration of the 4Ps. In brief:
  - **Product** – What we are “selling” is a set of behaviours that individuals can engage in to reduce their risk of contracting, and transmitting, bird flu;
  - **Price** – In order to persuade people to engage in these behaviours, we need to reduce the perceived personal costs of engaging in them (financial, social, psychological etc.) and increase the perceived benefits (increased protection from the disease);
  - **Place** – Given the need to provide information, services and products to the entire population, we need to use a range of channels to disseminate information and facilitate the behaviour change; and
  - **Promotion** – Given the potential for the disease to spread rapidly once it achieves effective human-to-human transmission, we need to develop effective messages and a clear and comprehensive plan for the media channels for their dissemination.
1.3 The ‘Preparation Without Panic’ Project

It was in this context that the research team was awarded funding from Australia’s National Health and Medical Research Council to undertake a comprehensive study to inform government policy and practice in the event of an avian influenza pandemic – specifically how to prepare (but not panic) the general public.

The research phases included: a media analysis of coverage of a potential pandemic; extensive qualitative formative research; two population CATI surveys; two airport intercept surveys; message development; and message testing.

2 Phase 1: Analysis of News Media Coverage of a Potential Pandemic

This study used Protection Motivation Theory (PMT) components as a conceptual framework to explore how the Australian media portrayed the health risk of avian influenza by reviewing newspaper stories published during 2006.¹

2.1 Method

All major Australian national and metropolitan daily broadsheet and tabloid newspapers available through Factiva.com were searched for the period 1 January 2006 to 31 December 2006. Documents were analysed using a coding framework developed from a variety of sources. The coding scheme by Washer (2004) was examined and literature on media analysis of other health issues was reviewed to assist in the construction of appropriate themes.

2.2 Results

A total of 850 articles were identified and analysed. The frequency of reporting was higher in the first 5 months, coinciding with reports of the first human cases in Turkey, Iraq, Egypt and Cambodia, new cases and fatalities in Indonesia and China, and the increasing incidence in animals across Europe and Africa.

Using a Protection Motivation Theory framework (Rogers 1975), the identified articles were examined for references to themes depicting (1) “vulnerability”, or the likelihood of avian influenza occurring, (2) “severity” or seriousness of the avian influenza threat, and (3) adaptive response or actions taken to avoid infection.

¹For full details of this study, contact the first author.
Vulnerability  The focus was on reporting the incidence of both human and animal cases around the world. Coverage of scientific concerns on the potential for the virus to mutate (which is necessary for human-to-human transmission) accounted for 13% of stories. Avian influenza was reported as a potential threat to Australia in 24% of the articles.

Severity  Over 50% of the articles reported that avian influenza was “deadly”, and 35% mentioned an avian influenza pandemic.

Adaptive Responses  Nearly 30% of the articles addressed some sort of treatment or prevention, with 19% specifically mentioning a drug or vaccine for human cases. The impact of avian influenza on the world or local economies was addressed in 14% of articles, and methods of self-protection such as hand washing were mentioned in just over 10% of articles.

2.3 Discussion

Avian influenza received considerable coverage in the Australian media in 2006. The intensity of media coverage reduced over time, both in terms of total print news coverage and the nature of the coverage. The potential impacts of this pattern of coverage are twofold. First, the use of high-fear language (such as “panic” and “death”) had the potential to cause elevated levels of concern among members of the general public at a time when the risk to the Australian population was extremely low. Second, the initial emphasis on avian influenza followed by the apparent reduction in coverage had the potential to artificially reassure the general public that avian influenza no longer posed a threat to Australia. In both instances, the meaning people derived from the situation, a primary determinant of their quality of life (Skevington 2002) was likely to be at odds with the reality of the situation.

It is particularly concerning that there was limited media coverage that focused on protective or preventative issues. The media coverage of avian influenza provided numerous, ongoing opportunities for journalists and health writers to discuss, or even emphasise, the value of preventative behaviours such as hand washing, use of disposable tissues, and other hygiene practices known to reduce the likelihood of transmission of influenza and other infectious diseases. There was no discussion of actions that domestic poultry farmers or the poultry industry could take. Further, much of the media coverage stated, or at least implied, that Australia would be well prepared to handle a potential pandemic. Finally, a high proportion of articles suggested that appropriate treatments were currently available or would become available in time, thereby implying that Australia had the ability to ameliorate the effects of an avian pandemic. Thus, by inference, members of the general public may have felt that it was unnecessary for them to undertake simple preventative actions (such as increased hygiene) when a pharmacological treatment or a vaccine would be available to avert a pandemic.
3 Phase 2: Qualitative Formative Research with Consumers

The purpose of this research phase was to gather preliminary information on the Australian public’s knowledge of, and concerns about, avian influenza (H5N1); with the primary aim being to inform the development of future communication strategies.²

3.1 Method

Four focus groups were conducted in April 2006 (total n = 32), and eight in July 2006 (total n = 64). The groups were conducted by two commercial research companies, using a discussion guide developed in consultation with the research team, with specific inclusion criteria and quotas to ensure representation of participants from a range of potential at-risk groups.

3.2 Results

Key themes arising from the focus groups were that bird flu³ is a disease associated with poor people in Asian countries, that Australians are ‘safe’ from such outbreaks, and that the disease could be ‘caught’ rather than spread. Even when forced to think of bird flu, by virtue of direct questioning by the focus group moderator, this still was not seen as an issue of concern for Australia. Importantly, it was not simply that Australia was far from mind when thinking of bird flu, but that participants also saw Australia as a haven protected from bird flu.

Emotionally, participants expressed a strong belief that bird flu was merely media scare mongering. Participants’ past experiences with similar scares (especially SARS) had given them a perception that the media exaggerates potential health scares (“It’s another example of media hype over scares that never eventuate here. Its just like SARS, the Y2K bug…”). This view was supported by participants’ perceptions that the media coverage had died down (“More concerned a year ago, but now hear less about it”), reflecting that this was just another media “beat-up” and that the unnecessary overreaction of the media was dying down.

It is important to note that the participants described bird flu as a disease that can be caught, rather than a disease that can be spread. The general consensus in the

²For full details of this study: Jones, S. C., Iverson, D., & Waters, L. (2010). “Just don’t eat chicken”: The challenge of engaging Australian adults in appropriate preventive behaviours for bird flu. International Journal of Nonprofit & Voluntary Sector Marketing, 15(1), 78–90.
³Note that the focus group participants used the term ‘bird flu’ and rejected ‘avian influenza’ as a term that sounded too scientific and not consistent with their perceptions and conversations about the topic (thus the term ‘bird flu’ is used throughout the results and discussion).
April focus groups was that bird flu is transmitted directly from bird to human (i.e., by physical contact) and the single most common belief as to how one catches bird flu directly related to the consumption of a diseased bird. Of interest is the finding that many believed that this mode of infection could be prevented by thorough cooking of the infected bird.

In the second round of focus groups (July), there was an increase in the use of words such as ‘contagious’ and ‘epidemic’, suggesting an increased awareness of the fact that the disease could be caught – possibly associated with media coverage of human-to-human transmission in Indonesia – although the perception that it was a problem ‘over there’ remained strong across all groups.

The participants had difficulty engaging in a discussion of what could be done to help prevent the spread of bird flu. A hypothetical scenario had to be introduced to engage the participants in the concept of bird flu in Australia, and thereby contextualise the question of what could be done. The responses, however, still highlighted the fact that this was considered a far-fetched scenario with preventative measures almost exclusively focused on travel restrictions and border control and quarantine protection (and not eating chicken). No spontaneous mention was made of mask wearing or bunkering down – the key solution was to restrict the consumption of chicken and eggs.

Participants expressed confidence in the Government and “people in the know” to let them know “when they should panic”, which means that they can relax until they are informed otherwise. However, the process of the research – which for many involved processing bird flu issues for the first time – raised areas of confusion and areas of information they would want addressed in the advent of bird flu in Australia. These included: "How is it spread," “Access to vaccines,” “What are steps we should take,” “Mortality rate if get bird flu,” and “Symptoms – what to look for”.

### 3.3 Discussion

Contrary to our expectation that the media coverage may have resulted in a high degree of concern among the general public about a potential bird flu pandemic, it was evident that the participants had very little knowledge of, or interest in, bird flu. They required considerable prompting to enter into a discussion of bird flu, and few of them spontaneously mentioned it when thinking of diseases that they were concerned about.

The differentiation between *caught* and *spread* is an important one, as it highlights the lack of urgency or panic associated with bird flu. If bird flu is *caught*, then it can be prevented by avoiding direct contact with the contagion. In contrast, to have a disease *spread*, suggests mass contamination, indiscriminately affecting large numbers of people. It was also clear from the focus groups that many participants perceived bird flu to be “yet another” media beat-up, rather than a genuine health risk. The perceived reduction in media coverage over the last few months of 2006 supported the belief that this was just another example of the media exaggerating a disease risk.
4 Phase 3: CATI Survey of Australian Adults (May 2006)

The purpose of this research phase was to determine the Australian public’s knowledge of avian influenza, their willingness to engage in preventive behaviours, and their acceptance of potential messages and spokespeople for communication campaigns in the event of a bird flu pandemic.4

4.1 Method

A computer-assisted telephone survey (CATI) was conducted between 16th and 20th May 2006. The sampling frame was the Desktop Marketing System (DTMS), which is a form of the electronic White Pages. Of the 2816 telephone numbers called, 1185 eligible households5 were identified and 203 interviews were completed with persons from the eligible households (response rate of 17.1 %). The interview length averaged 11.27 min.

4.2 Results

Of the 203 respondents 51.7 % (105) were female, and 75.9 % were born in Australia. Respondents were spread across all age groups, with 12.4 % aged between 18 and 34 years; 19.7 % aged 35–44 years; 19.2 % aged 45–54 years; 24.6 % aged 55–64 years; and 23.6 % aged over 65 years.

Respondents were first asked a general open-ended question about infectious diseases: “Living in Australia in 2006, what infectious diseases come to mind?” The most commonly first-mentioned (i.e., top of mind) diseases were HIV/AIDS (22.2 %), influenza/flu (18.2 %) and avian/bird flu (14.3 %). Respondents were asked which disease was of greatest concern to them. Not surprisingly, this list was similar; the diseases of greatest concern to respondents were HIV/AIDS (18 %) and influenza/flu (15 %).

Respondents were then asked a series of specific questions about bird flu. Over half the respondents stated that it was either very likely (21.7 %) or somewhat likely (37.4 %) that bird flu would spread from human to human; although there was a far lower level of agreement that this would be the case in Australia. Importantly, less than one quarter of respondents were very concerned (10.8 %) or somewhat concerned (12.8 %) that they themselves or someone in their immediate family might catch bird flu.

4For full details of this study: Jones, S. C., & Iverson, D. (2008). What Australians know and believe about bird flu: Results of a population telephone survey. Health Promotion Practice, 9(4 Supplement), 73S–82S.
5That is, they were active telephone numbers of residential addresses.
Respondents were fairly evenly divided in their level of confidence in the Federal government’s ability to handle an outbreak of bird flu. However, the majority were in favour of the government quarantining persons who had been exposed to bird flu (96.1 %), closing the borders to visitors from countries with outbreaks (81.8 %), and encouraging people to work from home when possible (74.9 %). There was less support for the closing of schools (65.5 %) or offering people experimental vaccines or drugs (54.2 %).

The actions respondents were themselves most willing to take were increasing their hand washing (83.3 %) and cleaning items they share with other people (71.4 %). There were, however, several actions that a large proportion of the respondents stated they would not be prepared to take – including avoiding physical contact with people (50.7 %), purchasing face masks (39.9 %), asking their doctor for a prescription for a flu vaccine or antiviral drugs (34.0 %), making plans to keep their children at home from school (32.0 %), and cleaning items they share with other people (26.1 %).

There was a marked increase in the respondents’ willingness to engage in these protective behaviors in the event that the Federal government issued a warning that there was an increased risk of bird flu. However, there were some actions which a significant minority stated they would still not engage in, including avoiding physical contact with people (27.1 %) and asking their doctor for flu vaccines or antiviral drugs (17.2 %). Surprisingly, 10.8 % of respondents indicated they would not keep their children at home from school even if advised to do so by the Federal government.

4.3 Discussion

Awareness and concern about bird flu as an infectious disease was low with only 20 % of respondents spontaneously identifying it in an open ended question (14 % as the top-of-mind disease), and only 11 % identifying it as being an infectious disease of great concern to them. This is noticeably lower than the 62 % of US residents who indicated in January 2006 that they were concerned about the possibility of a bird flu pandemic (Blendon et al. 2006). While over half of Australians believed that bird flu would spread from human to human, only a quarter believed this would occur in Australia.

In both Australia and the US there appeared to be widespread support for bird flu control measures initiated by the Federal government. The Australian public was willing to take preventive measures if they were advised to do so by the government. The level of support for control measures in the event of an anticipated bird flu outbreak is generally consistent with the actual support reported by Hong Kong residents for complying with the recommended SARS-related precautionary measures (Leung et al. 2003). However, in that survey less than half the respondents reported actually practicing five of the seven recommended precautionary measures. If the Australian public complied with only those Commonwealth-recommended actions...
with which they agreed, the ability to control an actual bird flu outbreak would likely be significantly compromised.

5 Phase 4: CATI 2 (September 2006)

This phase of the study was designed to (a) collect data from a larger sample than the previous CATI; and (b) to determine whether there had been any changes in the Australian public’s knowledge, beliefs, attitudes, or willingness to engage in preventive behaviours since the initial survey was conducted in May 2006.6

5.1 Method

A computer-assisted telephone survey (CATI) was conducted 28th August and 14th September 2006. The sampling frame was again the Desktop Marketing System (DTMS). Of the 9,159 telephone numbers called, 5,565 eligible households were identified and 805 interviews were completed with persons from the eligible households (response rate of 14.5 %). The interview length averaged 12.36 min.

5.2 Results

Of the 805 respondents 55.0 % (443) were female, and 78.8 % were born in Australia. Respondents were again spread across all age groups, with 18.5 % aged between 18 and 34 years; 17.5 % aged 35–44 years; 23.3 % aged 45–54 years; 18.9 % aged 55–64 years; and 21.5 % aged 65 years and over.

The three most commonly mentioned top-of-mind diseases were HIV/AIDS (23.4 %), meningococcal disease (10.6 %), and influenza/flu (10.4 %). Importantly, bird flu fell from the third to fifth most-frequently mentioned disease (including first and subsequent mentions), with only 10.8 % of respondents spontaneously mentioning bird flu, compared to 20.3 % in survey one.

Consistent with this, the disease of greatest concern was meningococcal disease (14.8 %), compared to only 4.4 % in survey one. Among the other most concerning diseases were HIV/AIDS and influenza/flu. The drop in spontaneous mentions of bird flu was reflected in a drop in the proportion of respondents identifying this is the disease of most concern (from 10.8 % to 5.6 % in survey two).

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6For full details of this study: Jones, S. C., Iverson, D., Waters, L., Sutherland, M., Gold, J., & Puplick, C. (2012). How quickly did bird flu go off the public radar? Results of a follow-up CATI survey of Australian adults. In K. M. Taylor & B. O’Connor (Eds.), Avian Influenza: Molecular Evolution, Outbreaks and Prevention/Control. Nova Publishers.
Just over one quarter (27.3%) of respondents agreed that bird flu had ever been spread from human to human. Less than quarter of respondents believed that this would occur in Australia, or reported that they were very concerned or somewhat concerned that they or a member of their family may catch bird flu (there was a sizeable increase in the proportion reporting that they are not at all concerned between survey one and survey two).

As with the previous survey, the majority of respondents were in favour of the government quarantining those who had been exposed to bird flu, closing the borders to visitors from countries where people have bird flu, and requiring people to work from home when possible. They were less in favour of the government closing schools and offering people experimental vaccines or drugs although the proportion in favour had increased considerably since survey one.

When asked what actions they thought would be their highest priority to protect themselves and their families if we had bird flu in Australia, the most commonly mentioned actions were to enquire about or have a vaccine, avoid people or places who might be infected, and to isolate or quarantine themselves (although even these were mentioned by less than one quarter of respondents). An even smaller proportion of respondents spontaneously mentioned the actions which are actually most likely to reduce the spread of bird flu; washing hands more frequently (3.5%), wearing face masks (5.5%), and using disposable tissues rather than handkerchiefs (none).

5.3 Discussion

The first, and perhaps most important, finding from this second CATI survey was that – only 4 months later – bird flu was increasingly “off the radar” for the majority of the Australian population. The findings in relation to meningococcal disease were surprising, and add considerable support to the often-stated view that the media serves an agenda setting function in relation to health and medical issues. All mentions of meningococcal disease increased from 5.9% in May to 19.9% in September; top of mind mentions increased from 4.9% to 10.6%; and mentions of meningococcal disease as the disease of most concern increased from 4.4% to 14.8% (surpassing even HIV/AIDS). A retrospective search of Australian and New Zealand newsprint coverage for the periods 01 April to 31 May and 01 August to 30 September 2006 found that in the former period there were 68 articles relating to meningococcal disease and in the latter period 238. It is reasonable to assume that the increase in awareness and concern for meningococcal disease was a result of this high level of media coverage of the condition.

A second important finding was that the general public appeared willing to engage in the appropriate preventive and protective behaviours, but were lacking

7 Note that in the previous survey we asked whether they believed it would ever spread human-to-human, but by the time of survey two human-to-human transmission had been confirmed.
awareness of what these behaviours are. That is, respondents’ spontaneous mentions of high priority actions to protect themselves and their families were vaccination (although there was at the time no vaccine available for bird flu) and avoiding infected others and quarantining themselves. Only a very small proportion of respondents spontaneously mentioned hand washing or wearing face masks, and none mentioned use of disposable tissues. However, when asked about their willingness to engage in these behaviours were they advised to do so, almost 90% responded that they would be willing to engage in more frequent hand washing and change to the exclusive use of disposable tissues, and almost 70% that they would be willing to wear face masks.

6 Phase 5: Airport Intercept Surveys (Oct–Nov 2006)

The purpose of this phase was to determine the likely and preferred sources of information about bird flu among residents and visitors in the event of an outbreak or pandemic within the country of destination.8

6.1 Method

Two airport intercept surveys were conducted in late 2006. The target group was business & economy travellers across six major airlines, departing for Asia and Europe from Sydney International Airport. The first survey was conducted on the weekend of 28th and 29th October 2006, and the second on the weekend of 25th and 26th November 2006.

6.2 Results

A total of 310 departing travellers completed the survey. Half (50.3%) were female and 61.3% were born in Australia. The age distribution was: 14.5% aged between 18 and 24 years; 22.6% aged 25–34 years; 20.6% aged 35–44 years; 19.1% aged 45–54 years; 17.1% aged 55–64 years; and 6.1% aged 65 years and over.

Respondents were asked “where would you go for information about bird flu?” The overwhelming majority said they would seek information from the Internet (40.3%); this response was given by almost four times as many respondents as any

8For full details of this study: Waters, L., Jones, S. C. (2007). Where would Australian travellers seek information about bird flu? Results of two airport intercept surveys. Proceedings of the Australian and New Zealand Marketing Academy (ANZMAC) Conference, 2976–2982.
other source of information. This was followed by doctors/GPs (11.3 %), the Department of Health (7.4 %), and ‘the government’ (non-specific) and Department of Foreign Affairs and Trade (DFAT) (both 6.1 %).

In regards to seeking information from doctors/GPs, there were no significant differences associated with respondent gender, age or education. However, in regards to seeking information from the internet, this was more common among male respondents, those aged 18–44, and those with a university education.

6.3 Discussion

The respondents’ preferred and likely sources of information have serious implications for communication strategies in the event of a bird flu outbreak. The electronic revolution provides new opportunities and challenges for effective transfer of health information (Freimuth et al. 2000), and the internet in particular poses significant challenges to risk communication efforts. The internet as an entity contains an enormous body of information about health issues, for example at the time of the survey 7,020,000 results were found when ‘bird flu’ was typed into the search engine Google. However, many websites are of questionable credibility and quality, and many sites are not easily accessible or understood (Cline and Haynes 2001; Benigeri and Pluye 2003; Dolan et al. 2004). Thus, it would be easy for the public to unknowingly source incorrect, misleading or confusing information, which they could then pass on to other members of the public. This information could then lead the public to respond to health issues in a way that is not conducive to management of the health issue, in this case a bird flu pandemic. In other words, their quality of life could be compromised by misperceptions regarding the level of risk involved and the appropriateness and effectiveness of strategies for prevention; with negative health consequences.

7 Phase 6: Message Testing

The qualitative and quantitative studies (phases one through five) consistently found that people were generally unconcerned about bird flu and did not see the problem as an issue for Australia.9 Thus, this research phase was undertaken to pre-test, modify, and re-test the ‘ready-to-use’ campaign materials for a pandemic preparedness campaign.

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9For full details of this study: Jones, S. C., Waters, L., Holland, O., Bevins, J., & Iverson, D. (2010). Developing pandemic communication strategies: Preparation without panic. *Journal of Business Research*, 63, 126–132.
7.1 Method

A leading Australian advertising agency was contracted to prepare campaign concepts for testing. The agency undertook the campaign development as two independent teams, each developing an alternative approach. This dual approach resulted in two very different campaigns for testing: a presenter approach (Spokes People), and a non-presenter approach (Paper People). Each campaign consisted of two phases: Phase 1 for pre-pandemic communications, and Phase 2 for communications in the event of detection of bird flu cases in Australia.

The advertising concepts (story boards and print ads) were first tested in a series of eight focus groups (July 2006), four in Victoria and four in New South Wales. Four distinct groups were purposively recruited: Young Adults/Travelers; Mothers with children aged 0–16 years; Adults Aged 50+; and Regional Community.

The results were used to make modifications to the campaign materials, and develop one coherent campaign to address both pandemic phases. The modified materials were then tested in a second series of focus groups (October 2006) in the same two states, with the same four distinct consumer segments.

7.2 Results

The ‘Paper People’ concept used cut-out paper people (which most people would remember making as children) as its visual theme, providing a very flexible and immediately recognizable vehicle for the campaign. It was intended to communicate that a virus is transmitted most easily when people are all together; thus our closeness is what makes us vulnerable; and that individuals and organizations need to work together to minimize the potential dangers of bird flu. Further, the paper people concept was seen as a way to represent all people in Australia. The Paper People concept tested as effective in Phase 1, with this more gentle approach inherently less likely to raise anxieties and more likely to increase confidence that the government was on top of the problem and knew what to do. However, when used in Phase 2, the concept didn’t seem to reflect the (newly perceived) gravity of the situation.

The Spokes People campaign utilized a team of trusted medical/scientific professionals, each eminently qualified to speak to a specific phase of any pandemic – impending, happening or ending. The agency designed the campaign to be flexible and to balance empathy with gravitas; the campaign used a team approach to reduce reliance on any one spokesperson, an important consideration in a pandemic crisis. The Spokes People concept when used in Phase 1 tended to raise anxieties, to the extent that it appeared it may even produce panic in-and-of-itself so was clearly too heavy for the awareness-raising phase. Conversely, when used in Phase 2 the Spokes People concept increased confidence that we’re on top of the problem and are able to deal with it. The concept was credible and the inclusion of a human face was well received and perceived as treating people as intelligent.
Other key factors that were incorporated into the strategic thinking behind the modification of the ad concepts and development of the final ads for testing were that bird flu was not really on the public radar; and that the three actions which are actually most likely to reduce the spread of bird flu hardly gained entry onto the population’s high priority actions unprompted, but once reminded of them, they generally embraced each action as do-able.

The Phase One Paper People was an effective communication device as it symbolized the everyman, emphasised connection and co-operation, and was a simple visual device that everyone could understand. Similarly, the use of the colour red to indicate germs was an immediately noticed and easily understood device. The Wash, Wipe, Wear\textsuperscript{10} message was simple, easily remembered, and was often played back by focus group participants. The suggested actions were accepted as appropriate behaviour in the event of a pandemic (although a misunderstanding existed around the hand washing concept and some participants baulked at the idea of wearing a face mask). The revised Phase One was much more effective than the initial execution. The campaign still resulted in people taking the issue more seriously and becoming considerably more anxious about the threat. However, the big difference from the testing of the original concept was that people now asked fewer questions, and were left feeling personally less scared and more prepared and more confident about the government’s response.

The revisions to the Phase Two Spokes People campaign eliminated the criticisms raised in the initial concept testing. Participants still felt scared but did not raise questions this time about the futility of the required actions; participants were much more accepting of the ‘wash, wipe, wear’ message now that the message had been explained and communicated in Phase One. The transition from Paper People in Phase One to the use of the real people and a more serious tone in Phase Two worked well and was perceived as consistent by participants – that is, a different messenger but the same message. Participants reported that having a real person at this stage was very reassuring, and made them feel that someone was taking charge. Both the Chief Medical Officer (CMO) role and the man himself had credibility and gravitas and his measured, calm tone was perceived as reassuring; the inclusion of Fiona Stanley (an eminent Australian epidemiologist and physician) was endorsed as demonstrating to the public that a team is in place and working on the problem. The accompanying print ads were seen to be very clear, informative, and easy to read.

7.3 Discussion

Inoculation theory (Anderson and McGuire 1965; McGuire 1970) suggests that if people are given the worst-case scenario when only a hypothetical risk of catastrophe exists, they will process the risk less dangerously, come to terms with it, and be

\textsuperscript{10}Wash (your hands), Wipe (your nose with a disposable tissue), Wear (a face mask).
less likely to panic should a pandemic occur, than if they were to remain in an uninformed state. That is, to learn what a bird flu pandemic really is going to do at the same time as you learn that a pandemic has begun, would seem most conducive to eliciting a panic response.

This phase of the research suggested that in the early stages of a pandemic (i.e., prior to the identification of cases within a given country), communications should focus on increasing awareness of the disease and communicating important, but simple, protective behaviours to reduce the risk of transmission. Such a Phase I Campaign would be strategically important – both in addressing the public’s current level of complacency and in enabling the government to be seen to have acted – but a need exists to clearly communicate both the wash message and the need to take preventative actions prior to the confirmation of cases in local population. In later stages of a pandemic (i.e., where cases have been confirmed within a country or a region), communication campaigns need to effectively communicate the key messages for each stage of pandemic and motivate the public to engage in the correct preventive actions without creating unnecessary panic in the community. As such, these measures shift across both preventative and tertiary paradigms. They support a positive (and well-informed) perception of quality of life (Skevington 2002), by strengthening people’s confidence and capacity for action to reduce the risk of infection. Similarly, support for broader mechanisms that enable personal and social well-being, such as financial security, supportive relationships, and reduced discrimination maintain the potential for a healthy quality of life to be maintained at community level when the risk of infection is high and compounded by other challenges such as HIV/AIDS (Basavaraj et al. 2010; Horwood et al. 2015).

8 Conclusions and Recommendations

The findings from the media analysis study suggested that media coverage regarding avian influenza had likely raised the ‘fear’ level amongst the Australian public, while providing them with little or no information about what to do in the event of an avian influenza outbreak. Thus, in the event of a potential pandemic, a national communication strategy needs to be developed in advance of an outbreak, including the development and pre-testing of specific media messages. If this isn’t done, the most likely responses in the event of an outbreak will be fear and panic, both of which undermine public health efforts to control the outbreak.

The findings from the two CATI and two airport surveys suggest the Australian government and relevant NOGs and professional organisations would encounter a number of significant communication challenges in the event of a bird flu outbreak. First, the public must be aware of bird flu, have a reasonable understanding of its seriousness and perceive that they and their family are susceptible. Second, the government must have clearly identified control measures that the public can take prior to and during a bird flu outbreak, and have a strategy for communicating these measures in an effective manner to the public. Third, the government will need to
convince persons that they need to comply with all of the recommended control measures, not just those that they personally believe are important. Fourth, the government must have an effective communication strategy directed at medical personnel who are likely to encounter persons concerned about bird flu. This is important as in the SARS outbreak medical personnel were found to have critical gaps in their knowledge (Deng et al. 2006). Fifth, the communication strategy should try to create a sense of social responsibility and empathy amongst the population as this may increase the likelihood that they will comply with all the recommended control measures (Nickell et al. 2004) and support others facing multiple challenges. Sixth, the government must carefully select the persons and/or organizations that will have responsibility for being the ‘public face’ of any media campaign. Our results indicate medical personnel and medical organizations are likely to be perceived by the public as being the most credible sources for delivering bird flu messages. And, finally, there should be at least two components of any communication strategy – one that prepares persons in the event of a bird flu outbreak, and one that directs persons to take specific actions during the actual outbreak.

On this latter point it is encouraging to note that when the public actually encounters an infectious disease outbreak they are much more likely comply with recommended control measures (Blendon et al. 2004). However, it is equally important that this awareness-raising does not happen too far in advance of cases occurring in Australia as our results suggest that communicating risk in advance of its emergence, at least via the mass media, results in the public discounting the reality of the risk.

In relation to specific communication channels, we recommend that in the event of a potential pandemic, the government develops a comprehensive, credible and useful website about bird flu (given the frequency with which the Internet was mentioned as a source of information, especially by travellers). This site would need to be promoted widely to ensure reach to all national and international travellers, and to maximise the likelihood that people will access the site without effort. Ideally the public would not have to know what the site is and/or have to search for the site; it would be designed so that the site surfaces when “bird flu” is typed into a search engine. One such way of ensuring this is for the government to purchase those key-words relating to bird flu in each of the major search engines (such as Google, Yahoo, MSN) to ensure this website is at the top of any list of retrieved sites.

8.1 Implications for Social Marketing

Potential pandemics pose a major challenge for global social marketing. In the event that a pandemic does occur, social marketers throughout the world (along with governments, health services, and businesses) will face a task on a scale which has not previously been experienced – in terms of both the potential for widespread mortality and the speed with which high-quality comprehensive social marketing campaigns will need to be mounted. This would perhaps provide the ultimate test of
the efficacy of social marketing as a tool for bringing about behaviour change for the benefit of the individual, group and society. Additionally, in the case of a pandemic, a need exists to go beyond education/marketing. Social marketing or educational interventions are unlikely to work in isolation (see Rothschild 1999), and will need to be combined with policy and legislative actions such as closures of schools and workplaces and restrictions on air travel. However, such marketing campaigns will be an essential first step in raising awareness and knowledge.

Developers of social marketing campaigns will face a number of challenges, including: the need to raise awareness and concern about a bird flu outbreak to a level that motivates consumers to respond but not to a level that causes public panic; the need to ensure that control measures are clearly identified to the public prior to and during a bird flu outbreak, and that a strategy exists for communicating these measures in an effective manner to the public; and the need to convince persons that they need to comply with all of the recommended control measures, not just those that they personally feel are important. Further, they will need to have an associated strategy for their social marketing campaigns’ targeting intermediaries – such as general practitioners and other medical personnel, schools, business owners, and commercial and public organisations which could be utilised to disseminate information and resources. In this way, both individual and community perceptions regarding a healthy quality of life are likely to be supported even when the risks of infection are considerable.

Perhaps the most significant challenge for social marketing is apathy – both from consumers and from those who could potentially communicate with them. At the time the study was conducted, a general consensus existed within the scientific community that a bird flu pandemic would occur. The estimates regarding how widespread or virulent the pandemic would be varied significantly but even the most conservative estimates involved millions of deaths. In future cases of potential pandemics, given such uncertainties, social marketers (like consumers) may be tempted to take a wait and see approach, reasoning that no one should not waste financial and academic resources on researching and developing campaigns for a problem that may not eventuate. Taking such an approach is socially irresponsible given the consequences of an actual outbreak – presumptive planning and action is the only socially responsible approach.

8.2 Fast Forward to October 2014

In March 2014 the first cases of Ebola were reported in West Africa. The Ebola virus initially involves transmission of the virus from animals to humans via human contact with animal body fluids; once in the human population Ebola spreads from human-to-human through direct contact with the bodily fluids of infected persons or via materials (e.g., clothing) or surfaces (e.g., bathroom counters) on which the bodily fluids are present. While the average case fatality rate is estimated at 50% it can be much higher (i.e., >80%) (WHO Ebola virus disease Fact sheet; updated
September 2014). As of October 12, 2014 more than 4490 deaths have been attributed to Ebola in West Africa, with the largest number of cases occurring in Liberia.

When the outbreak was first reported there was little sense of concern, and certainly not panic, in Western countries as the epidemic was in a specific area of Africa. The WHO raised concerns early but these concerns did not appear to capture the attention of the international press or Western leaders. That all changed when Nina Pham, a nurse at a large Dallas, Texas hospital was diagnosed with an Ebola infection in October 2014 after treating a patient who died of Ebola on October 8. Within a week a second nurse who was involved in treating the patient became infected. Panic and blame attribution quickly occurred in the US.

A story in the Wall Street Journal (Armour and Hughes 2014) included a quote from US Representative Fred Upton from Michigan at a Congressional Hearing: “We need to protect the American people, first and foremost. People’s lives are at stake, and the response so far has been unacceptable”. The hospital in which the Ebola patient was treated admitted making mistakes and issued a public apology; the Director of the US Centres for Disease Control and Prevention (CDC) indicated that infection control protocol was broken in managing the patient but which aspects of the protocol were broken has not been determined. The second nurse who was infected travelled on a plane to Cleveland, Ohio and the passengers on the plane are being tracked down to determine their health status and who they came in contact with. Two schools in Cleveland were closed down because one of the teachers was on the plane with the infected nurse. The reactive nature of this ‘intervention’ on the risk for Ebola transmission illustrates the potential for the general community’s quality of life to be considerably undermined. The information is unplanned, inadequately monitored, and lack’s messages that enhance the community’s capacity to respond to the actual risk for infection.

Ebola cases have been confirmed in France and Spain, while a suspected case in Denmark was not confirmed. The international media’s attention is now on the Ebola situation but the stories and editorials imply that there is no plan in place that can control an Ebola outbreak should it occur. For example, an editorial in the New York Times (Osterholm 2014) stated that “What is not getting said publicly, despite briefings and discussions in the inner circles of the world’s public health agencies, is that we are in totally unchartered waters and that Mother Nature is the only force in charge of the crisis at this time”. He goes on to state that “If we wait for vaccines and new drugs to arrive to end the Ebola epidemic, instead of taking major action now, we risk the disease’s reaching from West Africa to our own backyards”. This editorial was written a few weeks before the first Ebola case occurred in the US.

The insights gained from our research with the bird flu situation clearly apply to the 2014 Ebola situation. There is no discernible plan to increase awareness amongst the target populations – in this case the general public, and front-line public health and health care workers. There appears to be little confidence in statements made by government, hospital and public health officials that ‘an outbreak can be contained’. As of this date there is no social marketing initiative in the US and most certainly there is not one in Australia. The general response seems to be ‘don’t worry, we
have a world class health care system that can manage an outbreak’. It appears to us that the lessons we learned from studying the bird flu pandemic have not been applied in the current Ebola situation.

The lesson is clear – countries have to anticipate problems (the Ebola outbreak could have been anticipated given the extent of international travel alone), and be prepared by having a comprehensive public health education program, based on social marketing principles, ready to be implemented prior to the outbreak landing on a country’s soil. A social marketing initiative combined with effective public health and health care control measures will have the greatest likelihood of reducing panic, maintaining a healthy quality of life, and resulting in the best possible outcome.

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