# H1N1 Pandemic Planning – Correlation Between Human Behaviour and Pandemic Planning

## **By Farhan Asrar**

In Canada, H1N1 pandemic planning was well underway before H1N1's first wave came into effect. The planning also included a well proposed outline of vaccinating Canadians against H1N1. The public were initially skeptical about the vaccine with polls indicating only one-third of Canadians intended to get vaccinated<sup>1</sup>. The public attitude varied from some who were anxious to get vaccinated to those who did not consider H1N1 to be a threat. However, this changed the day reports of children getting sick and/or dying first appeared<sup>2,3</sup>. Line-ups then began stretching long distances, largely comprised of concerned parents and their children<sup>2</sup>. This shift was a result of the ever-changing public perception and norms. Looking back, healthcare professionals can realize the significant impact human behaviour and perception has on the implementation of public health programs.

There are several health behaviour models and theories that aim to study human behaviour and intentions in order to predict health outcomes. One such model is the theory of reasoned action that suggests behavioural intentions are a result of one's attitude towards the behaviour and subjective norms surrounding that behaviour<sup>4</sup>.

The attitude towards the behaviour refers to the individual's positive or negative feelings about that behaviour, while subjective norms are defined as the perceived expectations of relevant people or groups that influence the individual in carrying out that behaviour<sup>4</sup>. Thus, the attitude towards H1N1 vaccination depended upon the individual's perception of whether the H1N1 pandemic would affect him/her as well as the perception on the benefits of vaccination. The subjective norms during H1N1 referred to influences one had on the notion of being vaccinated, i.e. if one was influenced by people or groups who thought it was helpful to be vaccinated or if those people or groups were amongst the majority that were initially undecided.



The dramatic shift seen in the attitudes and subjective norms of the public following reports covering the deaths of children due to H1N1 indicates that both factors can be influenced by changing trends, public opinion and media coverage<sup>2,3</sup>. The perceived susceptibility towards H1N1 changed with the public realizing that they and their families were vulnerable to the illness and the subjective norm at the time became such that many wanted themselves and their children to be vaccinated<sup>1</sup>. This led to an increased pace in the demand for vaccines and resulted in vaccine shortages, queue jumping by those not at high risk, and individuals being turned away after lining up for hours to get vaccinated<sup>1</sup>.

Attitude and subjective norms also influenced decision-making during other aspects of H1N1. One may recall that this pandemic was initially known as 'Swine Flu', but public perception led to the assumption that it was associated with pork consumption, resulting in increased consumer fears, decreased demand and 15 countries imposed restrictions on pork products from Canada and USA<sup>5,6</sup>. This provoked a successful push for a name change in the hopes of altering behavioural intentions<sup>7,8</sup>.

Such reflections emphasize the need for exploring public perception and social/behavioural factors during pandemic planning in order to better plan, predict and prepare for changes in attitudes and subjective norms of society once the pandemic comes into effect.

On the other hand, one could argue that predicting such behavioural changes to aid in pandemic planning is similar to playing the lottery. Former U.S. Secretary of Defense Donald Rumsfeld once said

"There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we now know we don't know. But there are also unknown unknowns. These are things we do not know we don't know"

At first, I found this to be amusing. However, looking back at Rumsfeld's quote from the perspective of H1N1 planning and the changes in behavioural intentions, one can't help but wonder if every pandemic will simply have 'known unknowns' and 'unknown unknowns' which may remain unaccounted for no matter how extensively we plan for it. In other words, the complexity of pandemic planning becomes further evident when even the miscued comments of politicians begin to make sense.

### Acknowledgements

I would like to thank Dr. Suhail M. Asrar M.D., Ph.D (Department of Physiology, University of Toronto, Toronto, Canada. Program in Brain and Behavior, Hospital for Sick Children, Toronto, Canada) for all his help, advice and assistance.

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