

Western Public Health Casebooks

2020

Case 14 : A Sticky Situation: A Medical Problem with a Social Solution

Stephanie Susman
Western University

Natasha Crowcroft
Centre for Vaccine Preventable Diseases, Dalla Lana School of Public Health, University of Toronto

Amardeep Thind
Western University, athind2@uwo.ca

Follow this and additional works at: <https://ir.lib.uwo.ca/westernpublichealthcases>

Recommended Citation

Susman, S., Crowcroft, N., & Thind, A. (2020). A Sticky Situation: A Medical Problem with a Social Solution in: McKinley, G. & Speechley, M. [eds] Western Public Health Casebook 2020. London, ON: Public Health Casebook Publishing.

This Case is brought to you for free and open access by the Public Health Program at Scholarship@Western. It has been accepted for inclusion in Western Public Health Casebooks by an authorized editor of Scholarship@Western. For more information, please contact wlsadmin@uwo.ca.

CASE 14

A Sticky Situation: A Medical Problem with a Social Solution

Stephanie Susman, BSc, MPH (Class of 2019)
Natasha Crowcroft, MA(Cantab), MSc, MD(PhD) (Director, Centre for Vaccine Preventable Diseases, Dalla Lana School of Public Health, University of Toronto)
Amardeep Thind, MD, PhD (Professor, Western University)

Mark Twain once noticed that “a lie can get halfway around the world before the truth can even get its boots on” (Heath & Heath, 2007). When it comes to public health, his observations are shockingly true. Stories about public health scares tend to spread like wildfire, whereas people with the correct information struggle to make their message 'stick'.

Lisa Walters could barely see the cameraman as the bright key light shone on her face. He seemed to ignore her uneasiness as he toyed with the angle of the camera to find the perfect shot. As Lisa sat anxiously in the chair, she thought to herself, "how could we let this happen? Where did we go wrong?" Normally the Chief of Immunization Research within the Province would address the media but due to unforeseen circumstances, she was not available. The provincial public health agency had hired a Public Health Consultant, Lisa Walters, to provide advice to the Minister of Health about immunizations, working with other organizations to provide expert opinion about vaccines, and relaying information to health professionals about communicable disease issues affecting the population's health. But she did not expect to be speaking directly to the public about the subject. As a Public Health Consultant, Lisa's expertise was in providing support, not interacting with the media.

Lisa recited her answers to herself as the cameraman indicated the five-minute mark. She had prepared for weeks in anticipation of this public interview. She had been given all the questions beforehand, and her answers were tailored to perfectly debunk any myths that the newscaster might try to throw her way but what if that was not enough? What if she could not get her message across? Or even worse, what if the general public interpreted her message the wrong way? With the recent increase in the imbalance of media coverage on immunization, her message on the effectiveness of vaccines might get lost in the media noise. As she waited on stage with the make-up artist dabbing the sweat off her upper lip, she thought about her main message – parents have such a difficult task navigating the increasingly complex media landscape regarding vaccination information. There are too many conflicting claims about vaccines competing for the attention of parents who are hesitant about immunization, and the mass influx of divergent recommendations is shaping the public perspective about vaccinations. Lisa knew she had to help set them straight.

With barely any media training, she was faced with a challenge. When trying to make her message stick, she often remembered the importance of her delivery and knowing her

A Sticky Situation: A Medical Problem with a Social Solution

audience, particularly knowing their point of view and knowing what they care about. Although Lisa was well aware of her usual tactics for communicating public health concerns to the media, the topic of vaccines poses a very difficult challenge. How was she to explain the risk? As a veteran at public health consulting, Lisa was well versed in creating risk communication plans but interviewing with the media was a new venture for her. How should she address the issue? Was she addressing the right audience? If so, what message should she share with them? Complicating matters further, Lisa knew she only had one shot to make the media care about her story and her expert opinion. Lisa was faced with the challenge of ensuring that her message resonated with her audience. She was constantly combatting the spread of misinformation throughout the province as she tried to find the best method of risk communication. Lisa began her uphill battle of addressing risk perception and risk communication. How could she increase the public's knowledge about the science of vaccines? How could she improve public confidence in vaccines? How could she change the public's perception about them?

BACKGROUND

The World Health Organization (WHO) listed vaccine hesitancy as one of the top 10 threats to public health in 2019, along with Ebola and climate change (WHO, 2019). Vaccine hesitancy is “the reluctance or refusal to vaccinate despite the availability of vaccines” (WHO, 2019). Public health interventions have made significant progress on establishing herd immunity and protection against infectious disease. To this date, public health professionals have worked hard to eradicate smallpox through mass vaccination and surveillance of the disease. Initially, the objective of the program was to mass vaccinate at risk populations, yet due to herd immunity, surveillance and containment of infected individuals was surprisingly more effective than mass vaccination. Altering the strategy, smallpox was declared eradicated in 1980 (Lane, 2006). There were similar efforts to eradicate polio after the success of smallpox, but vaccine hesitancy posed a serious threat to these advances. The reasons behind vaccine hesitancy are plentiful and complex. The WHO identified the main rationales underlying vaccine hesitancy as complacency, barriers to access, and lack of confidence (WHO, 2019). Vaccines work in an amazing way. They can create years of immunity for those who receive them and can protect people who have not received them through herd immunity. Vaccines protect people from disease by allowing their bodies to build the defenses it needs to stay healthy. The immunity of the underlying population is contingent on maintaining high levels of immunization coverage within the population. With high levels of coverage, a population can defend itself against disease.

Immunization Research and Evaluation Team

This provincial public health agency collaborates with partners in the health care system to provide expert guidance and provides research evidence on policies and practices to support a healthier population, through disease surveillance and by specifically addressing the health needs of the population. They provide public health practitioners, frontline health care workers, and public health researchers with the best science and evidence-based knowledge to keep the population healthy. The Immunization and Research Evaluation team provides scientific evidence and support to prevent and control vaccine-preventable diseases while promoting public health knowledge about immunization. They develop and highlight public health research programs that aim to provide information to enhance the well-being of the provincial population. Additionally, the team bridges the gap between evidence and action in public health.

Vaccine Hesitancy

As one of the leading research organizations in the province, this agency is responsible for the task of combatting the new movement against vaccines. There are two main end points on the

A Sticky Situation: A Medical Problem with a Social Solution

immunization belief spectrum: vaccine acceptance and vaccine refusal. To add to the complexity of the problem, between these end points lie a wide range of vaccine-hesitant assumptions (Exhibit 1). Vaccine hesitancy arises because of many different reasons, including people's concerns about vaccine risks and side effects (Macdonald, 2015), and confusion about how and when children should be immunized. Some parents agree to some vaccines but not to all, whereas other parents agree to have their child receive the first scheduled vaccination but fail to return for subsequent doses if needed (Macdonald, 2015). Although a relatively low percentage of Canadian parents (3%) are strongly anti-vaccination, there is an increasing cause for concern about the 35% of parents who fall somewhere along the vaccine-hesitancy continuum (Greenberg, Dubé, & Driedger, 2019). The ambiguity and uncertainty with the vaccine-hesitant spectrum "represents a complex risk communication problem" for public health professionals (Greenberg et al., 2019). For most members of the public, there is a unanimous agreement that childhood vaccination is a critical public health intervention. However, there is a large concern about the lack of consensus in terms of vaccine efficacy, creating a need for increased public health communication with parents to address their unease (Greenberg et al., 2019).

Looking at the larger picture, this issue can be perceived as a problem of risk communication. Scheufele (1999) argues that frames are both cognitive constructs (stories and lived experiences that we keep in our mind) and elements of public discourse (patterns of media and public communication). There are two main framings of the vaccine hesitancy population that the media tends to highlight. The first is a knowledge gap issue – if only parents had more knowledge about how vaccines work then surely they would choose to immunize their children (Greenberg et al., 2019). The second is irrational thinking – if only people were not so easily influenced by fake news and celebrity influence then they would choose to immunize their children (Greenberg et al., 2019). Although these accounts are compelling, they are not truly the real frames of the actual issue. Vaccine hesitancy is driven by a complex web of issues, such as limited health awareness, faulty perceptions of risk, cultural norms, access to large amounts of conflicting information, and declining trust in health experts (Greenberg et al., 2019). The problem is primarily influenced by how the media and health care professionals communicate the risk. The current struggles associated with how best to make the message stick involve addressing parental worries, concerns, and refusal behaviours. Vaccine-hesitant parents – people who are on the fence about the safety of vaccines but are not fully against vaccines – are the main target of the risk communication message. The goal is to create the right message from the correct sources to influence parental decisions to vaccinate.

Risk Perception

In terms of vaccine hesitancy, risk can be understood as the probability of an individual acquiring or dying from a vaccine-preventable disease. Risk approaches differ depending on a person's life experience and expertise on a given topic. An expert may view risk as the probability of an event happening and the severity of the results (Fiske et al., 2017), whereas a nonexpert's perception of risk can be influenced by a variety of external characteristics beyond that of an expert's (Fiske et al., 2017). Fiske et al. (2017) suggest that there is an additional factor, considered the *dread* factor, that implies feelings and emotions have a role in risk perception. Risk perception is a key factor in the existence of vaccine hesitancy. The chance of acquiring a vaccine-preventable disease is based on the individual's ability to weigh the evidence, understand the effectiveness, and use reasoning and logic to reach conclusions (Fiske et al., 2017).

The issue is rooted in the fact that vaccines have worked so well to prevent the spread of certain diseases that many modern communities have not had to deal with a vaccine-

A Sticky Situation: A Medical Problem with a Social Solution

preventable disease outbreak (Velan, 2011). As a result of vaccine efficacy, some communities have not endured the devastation of vaccine-preventable diseases. Individual risk perception about vaccines can be altered by claims that adverse neurological disorders can occur after vaccination, even though many of these claims lack scientific validity (Velan, 2011). These claims tend to have a larger impact on an individual's perceptions of vaccines than does the absence of adverse events after vaccinations. For example, the media does not report about the absence of an event. "My child got vaccinated and nothing happened" is not an appealing story. These skewed tales have a high impact on the cognitive and emotional aspects of individual risk perceptions (Velan, 2011). In summary, people tend to underestimate the symptom severity and probability of acquiring a vaccine-preventable disease, whereas they tend to overestimate the risk of being immunized (Velan, 2011).

Risk Communication

Risk communication can be defined as the translation of evidence-based information between experts, community leaders, or officials, and the individuals who are at risk (WHO, 2017). Risk communication provides the information necessary to enable people at increased likelihood of death or illness to acknowledge expert opinion so they can protect themselves and those around them. Risk is closely linked to individual behaviour and influencing a change in individual behaviour has become an important strategy for change in public health (Fiske et al., 2017). Improved risk communication is necessary to influence people about their individual health behaviours. Individual risk perception is a complicated concept and requires a variety of underlying theories to understand it.

How to Create an Effective Message There is no formula to make an idea stick; rather, there is a set of key traits shared among the best communicated messages. These six principles work together to best express an effective message (Heath & Heath, 2007).

Simplicity: The skill of exclusion and prioritization must be mastered to strip an idea down to its core – not necessarily shortening anything but ensuring the meaning behind the message is delivered in the clearest way without excessive explanation. This principle helps plan what is said to an audience.

Unexpectedness: Engaging interest and curiosity is necessary for an idea to last. Have mystery or twists, not just a plain explanation. Have questions so that the reader is hooked and curious. This principle helps break the ordinary pattern of information and creates something unique that grabs the audience's attention.

Concreteness: Giving ideas so that the reader can visualize the point that is being made; have details and descriptions. This principle helps establish common ground with the audience.

Credibility: Messages must carry their own credentials and be given by credible people. When explaining something, add in some facts with evidence so that it is believable. This makes people more interested in the message and more likely to learn something. This principle helps speak to the logical side of people.

Emotions: It is essential to make people feel something. Humans are wired to feel things for others, not for abstractions. Adding points that will appeal to the audience's emotions, whether happy, sad, angry, or frustrated, will increase interest. Emphasizing the benefits of what they are reading can help catch people's attention. This principle speaks to emotion and feelings.

Stories: How do we get people to act on our ideas? We tell stories. People relate to each other a great deal and telling stories or sharing experiences will intrigue them and precipitate action.

This principle provides people with examples of problems and the tools to solve them.

SPECIFIC AREA OF INTEREST

The Fundamental Four

To successfully communicate the risk of vaccine hesitancy, Lisa understands that all stakeholders need to input a collaborative to dispel myths and misinformation about vaccines. The four main players influencing individual decision-making about vaccines are frontline community health care workers, government health policy makers, the media, and community members. Lisa and her team are working closely with all stakeholders to reduce vaccine misinformation, although she realizes each stakeholder has its own limitations in addressing the issues.

Frontline Health Care Workers: Lisa and her team are working hard to assist the frontline health care worker population by providing them with the resources needed to tackle the conversation of vaccine hesitancy. However, this group has expressed concern to Lisa because of the number of barriers they face. She knows that frontline health care workers are often one of the most credible influencers of personal health decisions. In addition to directly interacting with people, they are the main players in helping them understand the benefits of vaccines and risks of health-related illnesses. Although these conversations are extremely valuable, she knows they can be quite difficult when individual beliefs conflict with professional advice. To combat confusion about vaccinations, all medical professionals must be united in their message when it comes to vaccine benefits – conflicting advice from medical professionals is especially damaging (“Vaccine Hesitancy: A Generation at Risk,” 2019). To ensure that frontline health care workers are fully prepared to tackle vaccine hesitancy, they need increased training, improved communication skills, sufficient medical and epidemiological knowledge, and a reduction in their own biases and behaviours. Overall, there is a need to increase the use of the messaging from provincial public health agencies so that frontline health care workers have the tools they need to adequately address concerns about vaccines. Frontline health care workers have the most influence on vaccine-hesitant individuals because they are the ones who experience face-to-face patient interaction and are typically the first point of contact for vaccine-hesitant people in our health care system (Dubé et al., 2016). Because of the nature of the Canadian health care system, frontline health care workers feel that they have insufficient time to talk to vaccine-hesitant patients (Dubé et al., 2016). The health-care system in Canada is strained and underfunded. Physicians are left with a growing list of responsibilities while facing multiple imposed cuts to funding from the government. These limitations are resulting in physicians having to ration health care and limit the time they spend with each patient. The conversation to alter personal perspectives about vaccines requires a large investment of time and patience, and many health care providers are finding this difficult to achieve (Dubé et al., 2016). Many providers do not have the time or resources to adequately interact with vaccine-hesitant people.

In addition, health care providers find that being too persistent in their attempts to alter patient perspectives about vaccines tends to push vaccine-hesitant people toward the refusal end of the spectrum (Dubé et al., 2016). With a lack of time and resources to address this issue, health care practitioners are getting frustrated about trying to convince parents to vaccinate their children. This frustration can lead to dismissal of these vaccine-hesitant patients, which can subsequently increase the distrust between health care providers and health care consumers (Dubé et al., 2016). Frontline health care workers are sometimes struggling with their own confidence about vaccines and vaccine safety, mainly resulting in the disconnect between pharmaceutical companies and physician knowledge. Some have indicated they might not be knowledgeable enough about how vaccines are developed or regulated in Canada (Dubé et al.,

A Sticky Situation: A Medical Problem with a Social Solution

2016). Health care providers are asking for more information on these topics so that when they are faced with vaccine-related questions they can provide the correct answers.

Policy Makers: Lisa's role in the government sector ensures that she works closely with health policy makers as well. Lisa understands governments and health policy makers are key stakeholders in promoting childhood immunization, disseminating knowledge, and implementing policies that reduce the health risks associated with vaccine hesitancy. Policy is clearly not very effective because the vaccine-hesitant population continues to grow ("Vaccine Hesitancy: A Generation at Risk" 2019). The current Immunization of Schools Pupils Act allows for vaccine exemption if parents choose not to immunize their children for medical, religious or philosophical reasons (Immunization of School Pupils Act, R.S.O. 1990, c. I.1). Additionally, this policy only applies to children who attend primary or secondary school, yet there are a number of homeschooled children who do not fall under this policy. Policy makers are now being challenged to develop unconventional vaccine policies to sustain the well-being of future generations. Public health professionals need to find ways to increase communication about the consequences of policies that permit vaccine exemptions for nonmedical reasons. Government agencies play a role in this policy development, but they too are faced with public mistrust. The public sometimes perceives the government as biased because they may have close ties to pharmaceutical manufacturers (Dubé et al., 2016). Therefore, the main issues for policy makers and the government are effective communication and building trust (Dubé et al., 2016).

Media: Lisa knows that one of the main issues rooted in vaccine belief is misinformation. Partnerships with media sources are necessary to allow widespread communication about evidence-based health information. She realizes it is necessary to increase media coverage that features public health officials showing the benefits of vaccines and discussing the consequences of disease exposure. Parents who are unsure about vaccines often search for information on the internet or on social media platforms. This can make them targets for false information, promoted by antivaccination advocacy groups, about the adverse effects of immunization ("Vaccine Hesitancy: A Generation at Risk" 2019). In terms of medical news, the media tends to be a secondary source of information. Researchers are finding that people tend to trust their health care professionals first and the media second, although the issue is that the media is more accessible and is often the first contact for information (Dubé et al., 2016). The media holds a great deal of power because they can reach more people, at a faster pace, than can health care providers. It is difficult to say whether the media is assisting the spread of vaccine-hesitant information, or whether it is the public's perception of the media (Dubé et al., 2016). The media's role in the issue appears to be that they report both sides of the vaccine debate with equal measure, yet the information is not equivalent. The alternative side of the argument is receiving equal weight, but it does not have scientific backing, it lacks legitimacy (Dubé et al., 2016), and it is gaining traction in the public's perception of vaccine risk. Even if the media is reporting scientific facts and promoting pro-vaccination messaging, it is not enough to tackle the issue because the media is also giving the vaccine-hesitant population a substantial platform for projecting its opinions, and this ultimately gives their arguments more support (Dubé et al., 2016). Additionally, when reporters interview vaccine experts, they tend to bombard these experts with targeted vaccine-hesitancy questions, which require a high level of understanding and knowledge to be answered effectively. In this case, the media may be undermining these experts and fostering mistrust (Dubé et al., 2016). The objectives of the media sometimes misalign with the goal of increasing confidence in vaccines because they tend to promote the more enticing, provocative, vaccine-hesitant stories rather than science-based vaccine facts (Dubé et al., 2016).

Community Members: Parents who have vaccinated their children can play a significant role in influencing their peers. Parents who have made this choice can be advocates for immunization

A Sticky Situation: A Medical Problem with a Social Solution

if they are provided with appropriate tools and resources so they can have informed conversations with their vaccine-hesitant peers and be more vocal about the vaccine hesitancy issue. These parents are sometimes silent on the pro-vaccination topic. This may be because immunizations are routine in Canada, so they are under the impression that everyone is vaccinating their children (Dubé et al., 2016). It would be helpful if parents had more influence on other parental vaccine perceptions. If parents of immunocompromised children become pro-vaccination champions, they may be more influential in spreading the message of the consequences of vaccines than the government or health care providers. The community has the power to overcome the distrust of authorities such as the government or health care providers (Dubé et al., 2016). Because vaccine-hesitant people want autonomy over their health and the right to make their own informed decisions, being told what to do when it comes to health care can add to their mistrust of authority figures (Dubé et al., 2016).

Potential Causes and Controversies of Vaccine Hesitancy

Dubé et al. (2013) discussed the following causes and controversies as they relate to vaccine hesitancy:

1. The role of the media in spreading misinformation. The ability to freely share ideas and content with our peers on social media and the imbalance of negative vaccination messages in the media is increasing vaccine hesitancy.
2. Trust in the source of information. Public health organizations can play a large role in communicating the need for vaccines; however, the reliability of these systems is not well understood by the population or even by some health care providers.
3. Beliefs regarding the efficacy and usefulness of vaccines. A common public health problem is the lack of evidence about diseases and ill health. Vaccination programs have been so successful that many vaccine-preventable diseases are becoming less prevalent and people have no firsthand experience with these diseases.
4. Lack of provider recommendation to be vaccinated. Most health professionals support vaccinations; yet some health care professionals within this population can be classified as vaccine hesitant. There have been cases where some health care professionals tend to lean more towards vaccine hesitancy due to their own personal bias and beliefs. This has a great effect on the rate of patient immunization.
5. Personal beliefs about vaccination. The importance of immunization is associated with an individual's acceptance of vaccines. Perceptions can be easily influenced by pictures or stories that are shared through the media.
6. Skewed risk perception about vaccine-preventable diseases. Risk perceptions are based on past experiences and emotion rather than on empirical evidence. Many people have not experienced the trauma associated with vaccine-preventable diseases.

PROBLEM OF DECISION

What is the most effective way to make Lisa's message on vaccination stick? Specifically consider which stakeholder should convey the message and what shortcomings are associated with each. What is the best method of risk communication? What different forms of risk communication should Lisa produce (pictures, graphs, statistics, or stories, etc.)? Can she create a message that will make sense to people? Use the 12 steps depicted in Exhibit 2 to help Lisa create an impactful vaccine communication campaign.

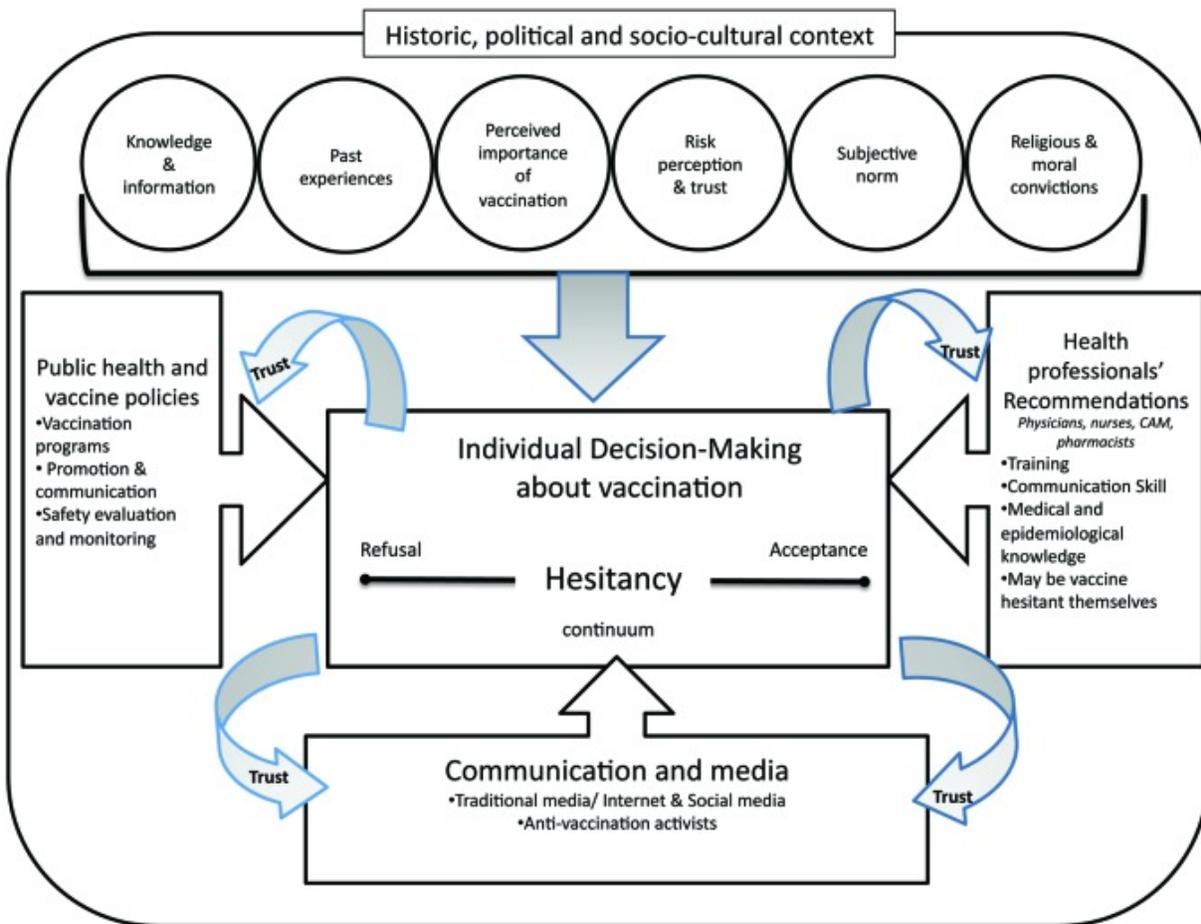
CONCLUSION

The increasing concern about vaccine hesitancy has created the need for different tools, approaches, and strategies to enhance vaccine acceptance. Many experts have proposed multipronged approaches to combat vaccine hesitancy at the population level, including

A Sticky Situation: A Medical Problem with a Social Solution

strategies such as communication campaigns and health marketing tactics. Vaccine-hesitant people are a unique group with a diverse set of justifications for their beliefs. Vaccine hesitancy is labelled as a 'wicked' risk communication problem for public health professionals because the reasons for hesitancy are complex and unique. A provincial public health agency is faced with the difficult task of combatting the miscommunication about vaccines within the province. The Chief of Immunization Research is out of the country and Lisa Walters, a public health consultant, has stepped in. Amid her inexperience, she has been working diligently to create an effective risk communication message that targets vaccine-hesitant parents. Ultimately, the problem relates to framing. Social media is overburdened with negative stories and misinformation about vaccines, which has led to a growing group of people who see vaccines as being more risky than safe (Pluviano, Watt, & Della Sala, 2017). The problem is greatly influenced by how the media and health care professionals frame the issue and communicate to the public. Lisa's goal is to plan a communication campaign by creating the right message from the correct sources to influence individual decision-making about immunization. In terms of vaccine hesitancy, framing the problem in the eyes of the targeted audience and creating a concise communication campaign can modify individual vaccine behaviour and increase vaccine acceptance by the general population.

EXHIBIT 1
Conceptual Model of Vaccine Hesitancy



Source: Lwembe et al., 2016.

EXHIBIT 2
12 Steps of Health Communication



At a glance: the twelve steps to developing a health communication campaign

1	2	3	4	5	6
<p>Project management</p> <p><i>Develop a plan to manage stakeholder participation, time, money, other resources, data-gathering and interpretation, and decision-making throughout the planning process.</i></p> <p>Engage stakeholders in meaningful ways.</p> <p>Use a clear decision-making process.</p> <p>Establish a campaign timeline.</p> <p>Plan how you will allocate financial and human resources.</p> <p>Consider what data will be required to make decisions at each step. Include adequate time for data collection.</p>	<p>Health promotion Strategy</p> <p><i>Establish or confirm a complete health promotion strategy.</i></p> <p>Ensure your project team is aware and supportive of your health promotion strategy.</p> <p>Use logic models as well as narratives to review and describe the strategy.</p>	<p>Audience analysis</p> <p><i>Collect demographic, behavioural and psychographic information to create an audience profile.</i></p> <p>Where possible, segment your audience.</p> <p>Use existing and new qualitative and quantitative data.</p> <p>Use a combination of less and more expensive methods.</p> <p>Use multiple data sources to confirm conclusions.</p> <p>Ensure you have a complete and compelling understanding of your audience.</p>	<p>Communication inventory</p> <p><i>Make a list of the communication resources in your community and organization – including alliances/relationships. Assess the strengths and weaknesses of using these to deliver your message.</i></p> <p>Modify existing inventories and directories, for e.g., media lists from partner organizations.</p> <p>When listing your resources, consider a mix of communication strategies, including media, interpersonal, and events.</p>	<p>Communication objectives</p> <p><i>Identify the bottom-line changes you hope the campaign will accomplish.</i></p> <p>Consider all four levels (individual, network, organization, society).</p> <p>Limit yourself to two or three objectives per level.</p> <p>Describe a change rather than an action step.</p> <p>Ensure objectives are specific, measurable, attainable, realistic, and time-bound (SMART).</p> <p>Ensure objectives address strategic priorities and your overall strategy.</p>	<p>Channels and vehicles</p> <p><i>Choose vehicles that will carry your message(s).</i></p> <p>Choose the best channels and vehicles for the situation based on reach, cost, and effectiveness (i.e., fit to situation, audience, and objectives).</p> <p>Use a mix of short and long-term channels and vehicles.</p> <p>Consider a mix of communication strategies, including media, interpersonal and events.</p>

Public Health Ontario wishes to acknowledge and thank THCU staff and many partners who contributed to earlier versions of this document. THCU (originally known as The Health Communication Unit, started in 1993 at the University of Toronto) moved to Public Health Ontario's Health Promotion, Chronic Disease and Injury Prevention Department in 2011.

Capacity Building Services and Resources
Version 4.0 October 2, 2012
Page 1 of 2

A Sticky Situation: A Medical Problem with a Social Solution

7	8	9	10	11	12
Combining and sequencing	Message strategy	Identity development	Production of materials	Implementation	Evaluation
<p><i>Combine and sequence channels and vehicles across timeline.</i></p> <p>Hold a big event first or build to a grand finale.</p> <p>Include activities with both high and low visibility, short and long shelf life.</p> <p>Be aware of special events, and holidays, friend or foe.</p> <p>Build on existing events but be ready for the unexpected.</p> <p>Balance your timing to achieve repetition but avoid message fatigue.</p> <p>Apply the rule: 3 messages, 3 times, 3 different ways.</p> <p>Link with issues that are capturing public attention.</p> <p>Integrate activities when possible. A single activity can have impact at all four levels.</p>	<p><i>Determine what you will “say” to your intended audience(s) to reach your objectives, and how you will say it.</i></p> <p>Ensure each message includes: a ‘What’; a ‘So what’; a ‘Now what’ (a clear indication of what the message is about; reasons the audience should care; clear next steps for the audience). This is a key part of creating the specifications of any communication product to guide production.</p> <p>Build upon information and decisions in steps 1–7, particularly audience analysis and objectives.</p> <p>To generate ideas, review materials from a variety of sources and assess what you like and don’t like.</p>	<p><i>Create an identity that will clearly communicate your image and your intended relationship with your audience.</i></p> <p>Use examples from a wide variety of sources to help determine your preferences.</p> <p>Produce materials that “carry the identity” – name, position statement, logo, and images, as required.</p> <p>Manage your identity, by ensuring all connections with your audience (e.g., print, verbal, online) are consistent with your identity.</p>	<p><i>Develop specifications for each desired product, select and contract with suppliers to create your products.</i></p> <p>Aim to produce the best materials within budget and on time.</p> <p>Manage reviews and sign-offs very carefully.</p> <p>Pre-test all material with intended audience.</p>	<p><i>Implement campaign.</i></p>	<p><i>Gather, interpret, and act upon qualitative and quantitative information throughout the preceding 11 steps.</i></p> <p>Throughout all steps, make the effort to:</p> <ul style="list-style-type: none"> • Check in with stakeholders about expectations • Dedicate some resources for evaluation • Ensure your efforts are evaluable

REFERENCES

1. Dubé E., Gagnon D., Ouakki, M., Bettinger, J. A., Guay, M., Halperin, S., ... Canadian Immunization Research Network. (2016). Understanding vaccine hesitancy in Canada: results of a consultation study by the Canadian Immunization Research Network. *PLoS ONE*, 11(6). doi.org/10.1371/journal.pone.0156118
2. Dubé, E., Laberge, C., Guay, M., Bramadat, P., Roy, R., & Bettinger, J. (2013). Vaccine hesitancy: an overview. *Hum Vaccin Immunother*, 9(8), 1763–1773. doi:10.4161/hv.24657
3. Greenberg, J., Dubé, E., & Driedger, M. (2017). Vaccine hesitancy: In search of the risk communication comfort zone. *PLoS Curr*, 9. doi:10.1371/currents.outbreaks.0561a011117a1d1f9596e24949e8690b
4. Heath, C., & Heath, D. (2007). *Made to stick: why some ideas survive and others die*. New York, NY: Random House.
5. Lane, J.M. (2006) Mass Vaccination and Surveillance/Containment in the Eradication of Smallpox. In: Plotkin S.A. (eds) *Mass Vaccination: Global Aspects — Progress and Obstacles*. Current Topics in Microbiology and Immunology, vol 304. Berlin, Heidelberg: Springer.
6. Lwembe, S., Green, S., Tanna, N., Connor, J., Valler, C., & Barnes, R. (2016). A qualitative evaluation to explore the suitability, feasibility and acceptability of using a ‘celebration card’ intervention in primary care to improve the uptake of childhood vaccinations. *BMC Family Practice*, 17(101). doi.org/10.1186/s12875-016-0497-9
7. Macdonald, N.E. (2015). Vaccine hesitancy: Definition, scope, and determinants. *Vaccine*, 33(34), 4161–4164. doi:10.1016/j.vaccine.2015.04.036
8. Pluviano, S., Watt, C., & Della Sala, S. (2017) Misinformation lingers in memory: Failure of three pro-vaccination strategies. *PLoS ONE* 12(7): e0181640. <https://doi.org/10.1371/journal.pone.0181640>
9. Public Health Ontario. (2012). At a glance: The twelve steps to developing a health communication campaign. Retrieved from <https://www.publichealthontario.ca/-/media/documents/twelve-steps-dev-health-comm.pdf?la=en>
10. Scheufele, D.A. (1999). Framing as a theory of media effects. *Journal of Communication*, 49(1), 103–122. doi.org/10.1111/j.1460-2466.1999.tb02784.x
11. Fiske, S.T., Schmälzle, R., Renner, B., & Schupp, H.T. (2017). Health risk perception and risk communication. *Policy Insights from the Behavioral and Brain Sciences*, 4(2), 163–169. doi.org/10.1177/2372732217720223
12. Immunization of School Pupils Act, R.S.O. 1990, c. I.1 (Canada)
13. WHO. (2019). Ten threats to global health in 2019. <https://www.who.int/emergencies/ten-threats-to-global-health-in-2019>
14. WHO. (2017) Communicating risk in public health emergencies: A WHO guideline for emergency risk communication (ERC) policy and practice. Geneva: World Health Organization. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK540729/>
15. Vaccine hesitancy: A generation at risk. (2019). *The Lancet Child & Adolescent Health*, 3(5), 281. doi: [https://doi.org/10.1016/S2352-4642\(19\)30092-6](https://doi.org/10.1016/S2352-4642(19)30092-6)
16. Velan, B. (2011). Acceptance on the move: Public reaction to shifting vaccination realities. *Human Vaccines*, 7(12), 1261–1270. doi:10.4161/hv.7.12.17980

INSTRUCTOR GUIDANCE

A Sticky Situation: A Medical Problem with a Social Solution

Stephanie Susman, BSc, MPH (Class of 2019)
Natasha Crowcroft, MA(Cantab), MSc, MD(PhD) (Director, Centre for Vaccine Preventable Diseases, Dalla Lana School of Public Health, University of Toronto)
Amardeep Thind, MD, PhD (Professor, Western University)

BACKGROUND

Vaccine hesitancy has been labelled as a complex risk communication problem for public health professionals because the reasons for this hesitancy are complex and unique. A provincial public health agency is faced with the difficult task of combatting the miscommunication about vaccines within the province. Lisa Walters, Public Health Consultant, has been working diligently to develop an effective risk communication message that targets vaccine-hesitant parents. Ultimately, the problem is one of framing, with the issue greatly influenced by how the media and health care professionals frame the issue and communicate with the public. The goal is to plan a communication campaign by creating the right message from the correct sources to influence individual decision-making on immunization. By using a set of six efficient risk communication principles, the most efficient risk communication message can be constructed. Finally, there are a variety of causes of vaccine hesitancy that can greatly affect the framing of the risk message. Lisa is participating in a media interview but does not feel prepared and is worried that her message will add to the negative media landscape on vaccines. The immunization team needs to create a multipronged, well-planned risk communication campaign to change individual vaccine behaviour but is having difficulty determining where to start or what approach to take. What is the most effective way to make a message on vaccination stick? Which stakeholder should be the one to convey this message and what are the drawbacks associated with using this stakeholder? What elements of risk communication are present for each stakeholder and which ones are lacking? What is the best method of risk communication? What different forms of risk communication should be produced (pictures, graphs, statistics, or stories, etc.)? Can a message be created that people will embrace?

OBJECTIVES

1. Define risk, risk perception, and risk communication from multiple stakeholder perspectives.
2. Develop modern approaches to a risk communication campaign by reflecting on the individual health belief model, the theories in health behaviour change, and the key principles in effective health messaging.
3. Evaluate multiple stages of a communication campaign to best influence behavioural changes by considering the perspectives of the individual, the community, and population level society.
4. Apply health communication and marketing skills to influence health-related behaviour changes at the individual and community level.

A Sticky Situation: A Medical Problem with a Social Solution

DISCUSSION QUESTIONS

A. Pre-class discussion/preparation questions.

In your learning teams, prepare a communication campaign to address one of the potential causes of vaccine hesitancy. Be sure to address the following questions:

1. When thinking about altering perceptions about vaccines, where should our attention be focused: at the individual, the community, or the societal level? Why?
2. Consider all stakeholders. Which group would best communicate vaccine risks to the public? Why?
3. What are some of the potential challenges associated with health communication?

B. In-class discussion questions:

1. What is the problem in the case?
2. How should we solve the problem?
3. What stakeholders will be involved in the campaign? Should we use all stakeholders?
4. Who is our target audience?
5. What is our main goal?
6. What is our main objective?
7. What do we know about our audience? Demographics? Behaviour? Personal beliefs?
8. What communication resources can we use? What is the best option?
9. What are some specific and measurable communication objectives?
10. What channels and vehicles should we use?
11. What should our message be?
12. What is the identity of our campaign?

C. Further discussion questions (if time permits):

1. What other health communication campaigns can you develop? What do you like about them? Can you think of any campaigns that have failed?

KEYWORDS

Risk communication; health and the media; behavioural change; communication campaign; health marketing; risk perception; vaccine hesitancy.