Vaccine Hesitancy, Social Media and the HPV vaccine

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Objectives

• Define vaccine hesitancy and vaccine confidence
• Discuss role of social media in vaccine hesitancy / confidence
• Use a situation in Quebec around HPV to illustrate the challenges in social media engagement
Refuse all with conviction
Refuse all, but unsure
Accept some, refuse some, delay vaccination
Accept with doubts & concerns
Accept all with confidence

Context

Vaccine Acceptance continuum

Less than 2%
Around 20%
Around 80%

Sources:
Not new ...

Context
Not new ...

but trigger by decreasing confidence in expertise and institution

Context

“I’m sorry, Jeannie, your answer was correct, but Kevin shouted his incorrect answer over yours, so he gets the points.”
Confidence in vaccination is one of a number of factors that affect individual and population-level vaccine acceptance.

Context

The skills and knowledge of the health professionals who provide information, recommendation and who administer vaccines.

The effectiveness and reliability of the system that delivers vaccines and monitors vaccine safety.

The motivations of the policy-makers who decide which vaccines are needed and when.

Sources:
Social Media and Confidence in Vaccines

**Websites**

Accessing *vaccine critical* websites for 5 to 10 minutes
- ↑ perception of risk of vaccination
- ↓ perception of risk of omitting vaccination and changes intention to vaccinate.

**Blogs**

Accessing *vaccine critical* blog on HPV: “stories”
- ↑ perception of risk of vaccination
- ↓ changes intention to vaccinate

*Betsch C et al J Health Psychology 2010 15:446-455
Social Media and Confidence in Vaccines

Highly polarised

Positive

Negative

HPV Sentiment on Twitter
Dunn et al. JMIR 2015

Not highly trusted

Parental trusted sources of information about vaccines (%)

- GPs, nurses: 60
- Pamphlets / factsheets by health authorities: 40
- Another healthcare provider: 30
- Social network members (partner, friends): 8
- Internet (websites): 7
- Social media: 1

The impact of social media on Vaccine Confidence: HPV in Quebec

Note: Pour les saisons 2008 à 2014, la CV concerne uniquement les élèves de classe régulière. Pour la saison 2015-2016, elle concerne tous les élèves de 4e année du primaire.

The impact of social media on Vaccine Confidence: HPV in Quebec (2015)

October 5
Paper in Le Devoir
24,564 FB shares

October 8
Reply in an open letter by CASI
1,697 FB shares

October 9
Provincial public health response
3 FB shares

October 13
Negative article about HPV vaccine in a popular magazine
22 FB shares

October 29
Reply of the researchers in Le Devoir
444 FB shares
The impact of social media on Vaccine Confidence: HPV in Quebec

- Comments against HPV vaccination show lack of confidence (Big Pharma and conspiracy theories)
- Often a ‘debate’ between supporters and opponents ➔ reinforce existing position instead of changing opinions

Risk to get cancer is much more higher than risks of adverse events. Natural news is not a good source of information! Please, read real scientific papers!

- Qualitative analysis - Facebook
  - Pro-vaccine: 35%
  - Anti-vaccine: 46%
  - Neutral - Ambiguous: 19%

Raising fears in parents is the best way for pharma to make money

Monitoring online comments on HPV vaccine in Quebec, 2015-2016
The large impact of the **negative publicity** was not anticipated by public health officials

- Delay in taking action to avoid giving credibility to the stories
- No interventions in social media

**We needed to sign the consent form for our girl last week and your paper confirms that we were right to refuse**

**There’s no way that my kid will serve as a guinea pig for this vaccine**
Health authorities engagement in social media - Challenges

Change in communication paradigm: not just a one way process

NO CONTROL OVER THE MESSAGE
EXPERTISE COULD BE CRITICISED

• Content expert ≠ communication expert and vice-versa
• Organizations vs. individuals, who is engaging?
• Need a constant engagement: time + resources to maintain information and infrastructure up-to-date
• Capacity to manage crisis
Health authorities engagement in social media - Opportunities

• Build trust

• Engage a dialogue with the population

• Reinforce pro-vaccine social norm by sharing positive stories on vaccination

• Promote vaccination resilience

• Address social contagion of vaccine concerns
Lessons learned

• Generally, people say they don’t trust health information on social media, BUT
  • Do not underestimate the potential power and effect of stories in social media

• Confidence in vaccination rely much more on EMOTIONS than on FACTS
  • Stories in social media are powerful because they are authentic, contain a narrative, and are from someone with whom parents can identify

Betsch et al. Medical Decision Making 2011
Lessons learned

• Communication in social media is a two-way process, it involves listening and tailoring messages:
  • Understand your audiences
  • Play the issue, not the opponents

• Use lessons from risk communication

• The most important audiences are often not engaged in online debates – the lurkers

• Confidence is complex... HARD to gain, EASY to lose

You CAN make things worst

Quebec’s HPV vaccine campaign, 2011
Vaccine or Chastity Belt

Goldstein S & MacDonald NE. Vaccine 2015
Thanks for your attention!

“There’s no reason to fear me! Would you like to see more evidence?”