Consumer engagement with online Canadian media coverage of seasonal influenza vaccination : An exploratory study of user generated content in Web 2.0

Preliminary findings

Research Team: University of Waterloo

- Michelle Simeoni, MSc Candidate, SPHHS

- Reenika Aggarwal, Research Assistant, SPHHS

- Richard Violette, MA, Research Coordinator, OPEN-Ontario Pharmacy Research Collaboration, School of Pharmacy

- Samantha Meyer, PhD, Assistant Professor, SPHHS

- Heather MacDougall, PhD, Associate Professor, Department of History

- Nancy Waite, PharmD FCCP, Associate Director Clinical Education, School of Pharmacy

Disclosure Statement

- Dr. Waite is currently collaborating with Santé Communications to develop KT strategies for a number of projects
- No other affiliations to declare

Consumer engagement with online health information

- Consumer access to health information is growing rapidly as the result of online media and engagement with 'Dr. Google'

- Pharmacists and other HCPs are now in competition with faster, more accessible and available information from alternate sources

- Web 2.0 provides quick access to health information with the advantages of interactivity, information tailoring and anonymity, which shape the '*consumption*' of health information

(Betsch, 2012; et al.)

What is Web 2.0?

Web 2.0 and social media platforms are a group of Internet applications which:

    a.   allow the creation and exchange of user generated content;

    b.   enable users to engage, articulate and make visible their social networks and affiliations.

User comments, 'shares' and 'likes' have become new means of measuring public interest, opinion and discourse around health information

(Kaplan,2010)

Defining characteristics of Web 2.0

1. <u>User participation</u>: Anyone can contribute. Personal stories and testimonials shape perceptions of incidence, convey and provoke emotion ("*living proof of the message*").

2. <u>Openness</u>: Data and information are readily accessible without traditional gatekeepers and can be questioned, corrected, reassembled and built upon to create '*new*' knowledge.

3. <u>Network effects</u>: Individuals can connect and collaborate with like-minded users to enhance and enrich participation, form communities and build up available resources.

(Witteman, 2012)

Purpose and aims

To explore the ways in which Canadian consumers engage with online media, <u>and with each other</u>, through user generated content around seasonal influenza vaccination/influenza vaccine (service vs. product).

a) Explore the current online media landscape around seasonal influenza vaccination/vaccine in Canada (CBC.ca)

b) Understand how consumers engage with each other around seasonal influenza vaccination/vaccine in Web 2.0 (CBC.ca user comments threads)

c) Identify consumer perspectives regarding the provision and administration of influenza vaccine by community pharmacists and other HCPs (CBC.ca user comments threads)

Methods

a) <u>Online news article selection</u>

- search strategy (n=1200+ news reports)
- inclusion/exclusion criteria (n=64)
- deductive thematic analysis, Bennett's (2010) framework of risk messages

b) <u>User comment data extraction</u>

- 33/64 online news reports include user comments (n=2042)
- Scrape v.1.7 (Google Chrome data mining extension)

c) <u>Analysis of user comments</u>

- inductive thematic coding (i.e. tone, rhetorical devices, reasons for and against, product vs service, HCPs, etc.)

Aim A: Online media landscape

Preliminary results (n=64 news articles)

- 64% (n=41) positive; 2% (n=1) negative; 34% (n=22) neutral
- 28% (n=18) vaccine as product; 52% (n=33) immunization as service; 20% (n=13) both product and service
- Many articles are promotional in nature (i.e. campaigns, locations, HCP service delivery)

CBC.ca media coverage of the seasonal influenza vaccination/ influenza vaccine does not contain many risk messages, but we did identify two of Bennett's (2010) fright factors:

1. Inescapable (i.e. strain (mis)match)
2. Inequitable (i.e. differences across provinces)

Aim B: User comments

Preliminary results (n=2042 user comments)

- Common rhetorical devices include: **anecdote**, syllogism, **sarcasm**, expletives, conflation, hyperbole, analogy, induction, deduction, propaganda, juxtaposition, **appeal to authority, appeal to emotion**, **appeal to social responsibility**, invection, begging the question and other logical fallacies

- Primary focus is influenza vaccine as a product rather than immunization as a health service

- User comments are highly polarized (pro-vax vs. anti-vax), very few neutral comments

- Personal choice is an important element across all users

- Commenters make the distinction between influenza and other vaccines (MMR, polio, TDaP, Hepatitis, etc.)

Aim C: Pharmacist administration

Preliminary results

User comments suggest general public support for pharmacists as influenza immunizers: pharmacists as trusted HCPs, convenience, accessibility outside working hours and on weekends with no appointment, etc.

Beyond the common reasons for not getting the seasonal influenza vaccine, certain pharmacy specific hesitancy factors include: perceived pharmaceutical industry ties ("Big Pharma"), privacy concerns, questions around injection training and competency, retail nature of the pharmacy space, questions around profit, etc.

Discussion Points

1) Web 2.0 is the contemporary "*around the water cooler*". As such, engaging with the public directly at the level of online communities is an important (and often neglected) strategy for HCPs to encourage positive vaccine conversations, support shared decision making and promote the importance of seasonal influenza vaccination.

2) A nuanced understanding of how individuals engage in vaccine conversations online can provide insight to guide, improve and tailor public health messaging around seasonal influenza vaccination.

3) Identifying provider-specific hesitancy factors (beyond the common reasons stated) will better prepare pharmacists and other HCPs to address these contextual concerns and foster constructive vaccine conversations.