

Do no harm: lessons learned about contextualizing your findings

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BACKGROUND

Post marketing surveillance of adverse events following vaccination is necessary to monitor vaccine safety. We published a peer-reviewed paper on adverse events following HPV vaccination that included data on emergency department (ED) visits or hospitalizations within 42 days of vaccination¹. We reported that of the 195,270 women that received 528,913 doses HPV of vaccine, 958 were hospitalized and 19,351 had an ED visit within 42 days of vaccination. We concluded that rates of adverse events after HPV vaccination in Alberta are low and consistent with those seen elsewhere. After publication all authors received unusual emails and interview requests and many social media postings were made about the article.

1. Liu XC, Bell C, Simmonds KA, Svenson LW, Russell ML. Adverse events following HPV vaccination, Alberta 2006–2014. *Vaccine* (2016) Apr 4;34(15):1800-5. doi: 10.1016/j.vaccine.2016.02.040. Epub 2016 Feb 26.

METHODS

We describe the sequence of events, hypotheses of the cause of these events, and actions taken.

We hypothesize that two factors influenced the high rate of social media commentary: the paper's title, and the lack of contextualization of the health service utilization.

CONCLUSIONS

- Our experience demonstrates the importance of contextualizing results to minimize the misinterpretation of study findings.
- Have a communication plan in advance of submission.
- Social media may be used at the time of study publication to disseminate misinterpretations of research findings and researchers should prepare accordingly.

RESULTS

Timeline:

February	April	May
HPV Paper is published	Inquiry from a Canadian journalist	Two interview requests from "independent" journalists
	UK tabloid journalist requested an interview	Two academic researchers request data
		UofC Media Relations Communication plan: single contact person, standard responses, support for interviews.
		The article scored in the 97th percentile of articles of the same age (60 days)

Google Results:

About 258 results (0.79 seconds)
SHOCK STUDY: Ten percent of Canadian females receiving ...
www.naturalnews.com/053851_HPV_vaccines_emergency_room_visits...
7 days ago - The study is entitled Adverse events following HPV vaccination, Alberta 2006-2014 and ... 9.9% ended up in emergency rooms in just 42 days.

10% of Canadian females receiving HPV end up in Emergenc...
www.truthlibrary.info/.../10-of-canadian-females-receiving-hpv-end-up-...
4 days ago - 195,270 girls tracked after receiving HPV vaccine injections... 9.9% ended up in emergency rooms in just 42 days. In the study, authored by ...

Debunked: Mike Adam's Claims Regarding HPV "Shock Study ...
[www.metabunk.org/Forums/Metabunk/Health and Quackery](http://www.metabunk.org/Forums/Metabunk/Health%20and%20Quackery)
4 days ago - The study is entitled Adverse events following HPV vaccination, Alberta 2006-2014 and ... 9.9% ended up in emergency rooms in just 42 days

10% of Canadian Females in ER after getting HPV Vaccine ...
<https://engineeringevil.com/.../10-of-canadian-females-in-er-after-getting-...>
3 days ago - 195,270 girls tracked after receiving HPV vaccine injections... 9.9% ended up in emergency rooms in just 42 days. In the study, authored by ...

SHOCK STUDY: Ten Percent of Canadian Females Receivin...
<https://socioeconomy.wordpress.com/.../shock-study-ten-percent-of-can-...>
5 days ago - 195,270 girls tracked after receiving HPV vaccine injections... 9.9% ended up in emergency rooms in just 42 days. In the study, authored by ...

10% of Canadian Females in ER after getting HPV Vaccine - ...
macedoniaonline.eu/content/view/29392/54/
3 days ago - 195,270 girls tracked after receiving HPV vaccine injections... 9.9% ended up in emergency rooms in just 42 days. In the study, authored by ...

SHOCK STUDY: Ten percent of Canadian females receiving ...
revolutionradio.org/?p=129165
5 days ago - 195,270 girls tracked after receiving HPV vaccine injections... 9.9% ended up in emergency rooms in just 42 days. The Rest...HERE - Share on ...

Tweets:

As of September 1, 2016: 516 tweets & 921,054 followers

Vaccine Choice CA
@VaccineChoiceCA

Alberta HPV vaccine 958 were hospitalized and 19,351 had an ED visit within 42 days of immunization #informedconsent <https://t.co/3XF84LKxvS>

07 Mar 2016

Vaccine Epidemic
@vaccineepidemic

195,270 females received 528,913 doses of HPV vaccine: 192 reported one or more AEFI events 958 were... <https://t.co/NCOCWyRKuL>

07 Mar 2016

emgfind
@emgfind

RT @ViraBurnayeva: NEW Canadian #STUDY: After #HPV #Vaccines 10% of the Girls End Up In #Emergency Room >> <https://t.co/lKqBNHoKCS> <https://t.co/...>

12 May 2016

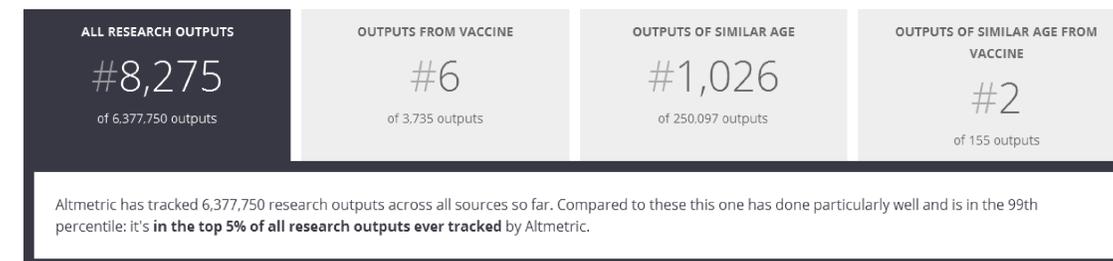
杉下京子@飯テロねずみすきー
@kyouko_sugisita

RT @tsuyomyakawa: しかし言及されている論文を見ると、その論文での結論は逆に「アルバータ州で報告されている有害事象の頻度は低く、他(アメリカ等)での報告と同等かそれ以下である」。そこで、その元論文 <https://t.co/KyNojhX9S> の責任著者に聞...

07 May 2016

PAPER METRICS

This research output has an **Altmetric Attention Score** of 355. This is our high-level measure of the quality and quantity of online attention that it has received. This Attention Score, as well as the ranking and number of research outputs shown below, was calculated when the research output was last mentioned on **21 September 2016**.



Communications Plan:

One media spokesperson with media training replied to emails and conducted interviews.

Key Messages:

- The HPV vaccine is safe and effective.
- HPV can be prevented through immunization. The HPV vaccine helps protect against HPV.
- Safety is at the heart of immunization, from manufacturing to monitoring of those vaccinated.

Frequently Asked Questions: (Answer Guide not shown)

- What proportion of those vaccinated reported an adverse event?
- Why did you look at the 42 days?
- Was the ED utilization exceptionally high among those vaccinated?
- What were the reasons for hospitalization among those vaccinated?
- Does being vaccinated cause the hospitalization?

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The original study was approved by the University of Calgary Conjoint Health Research Ethics Board (Ethics ID: REB 14-0598).