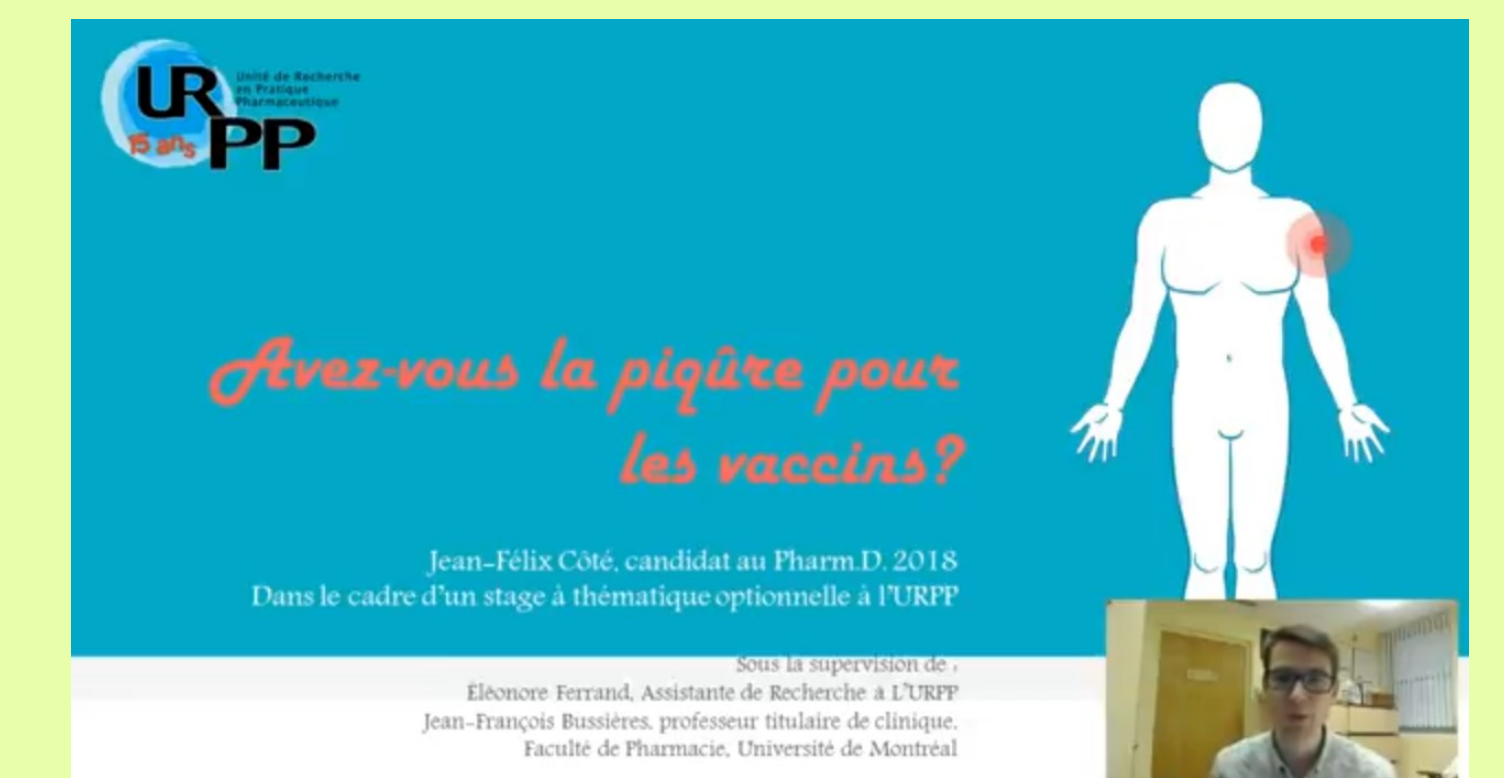


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This video can be viewed on Youtube  
<https://www.youtube.com/watch?v=jcx-06U9X1A&feature=youtu.be>

## Background

Immunization prevents millions of deaths per year. Pharmacists have been involved in immunization programs, including education, facilitation, reference and administration. In Canada, most provinces have given to pharmacists an injection authority.

## Objectives

The aim of this study was to evaluate the impact of an awareness program on vaccination for pharmacy students.

## Methods

- Descriptive pre/post study.
- In November 2017, first year Pharm D students were exposed to a 10-minute video about influenza/pneumococcal infections, immunization coverage and the evidences about the roles and the impacts of pharmacists in immunization.
- A pre-post online survey was administered to capture their profiles, knowledges, behaviors and satisfaction.
- Data were analyzed with Chi-square tests on the SPSS software.

## Results

### PARTICIPANTS

- 199 students were surveyed
- Participation rate:
  - Pre: 100%;
  - Post: 93%.
- 44% of respondents had already worked in pharmacy.
- 74 % were exposed to vaccination activities in pharmacy in collaboration with nurses.

### PROFILE

Variables	PRE intervention n (%)	POST intervention n (%)	P
Personal Immunization coverage against influenzae	No personal coverage in the last three years <b>133 (67%)</b>	Planned immunization for the next flu season <b>108 (59%)</b>	p=0.099
Injection authority	Agree with the vaccination carried out by pharmacists <b>171 (86%)</b>	Agreed with the vaccination carried out by pharmacists <b>167 (91%)</b>	p=0.142

### BEHAVIORS

Variables	Questions n (%)	Questions POST n (%)	p
Exposure to roles and impacts of pharmacists in immunization with scientific literature	« Have you ever read articles demonstrating the roles and impacts of pharmacists' immunization interventions? » <b>23 (12%)</b>	« I am now interested in reading articles about the roles and the impacts of pharmacists involved in immunization » <b>171 (93%)</b>	<b>p&lt;0.0001</b>
Verify vaccination status	« In my opinion, the pharmacist must ask for the vaccination status of patients » <b>139 (70%)</b>	« I will verify vaccination status » <b>171 (93%)</b>	<b>p = 0.0001</b>
Identify eligible patients for vaccination	« In my opinion, the pharmacist must identify eligible patients for vaccination » <b>180 (90%)</b>	« I will identify eligible patients for vaccination » <b>180 (98 %)</b>	<b>p = 0.002</b>
Document vaccination status in patient's records	« In my opinion, the pharmacist must document vaccination status in patient's records » <b>172 (86%)</b>	« I will document vaccination status in patient's records » <b>177 (91%)</b>	<b>p = 0.001</b>
Consultation of clinical guidelines	« I know the existence of the immunization schedule of the Quebec Immunization Protocol (PIQ) » <b>36 (20%)</b>	« I will consult the immunization schedule of the Quebec Immunization Protocol (PIQ) » <b>121 (66%)</b>	<b>p&lt;0.0001</b>

## Conclusion

This original intervention increased awareness of pharmacy students about the involvement of pharmacists in immunization and showed a benefit of being exposed to the literature about the roles and the impacts of pharmacists. Students should be mobilized during their training for future pharmacists' activities as they can eventually contribute to increase patients' immunization.

### KNOWLEDGE

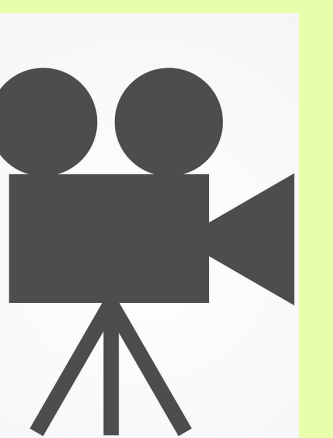
#### Authority for pharmacists to perform immunization elsewhere in Canada

⇒ Only 44% were aware that pharmacists in other provinces (e.g. Ontario, Alberta, Saskatchewan, Saskatchewan) had already the authority to perform immunization themselves

#### Controversies

- ⇒ 98% agreed with the absence of causal relationship between vaccines and autism spectrum disorders
- ⇒ 98% agreed with the absence of causal relationship between vaccines and sclerosis
- ⇒ 79% agreed with the absence of causal relationship between vaccines and Guillain-Barré syndrome
- ⇒ 59% agreed that the flu vaccine is very effective

### SATISFACTION



99% did appreciate the intervention and 97% were interested to participate to other similar interventions.