



UNIVERSITÉ DE  
SHERBROOKE

CENTRE DE  
RECHERCHE



# *Outil(s) pour communiquer avec les hésitants*

*DES-C Maladies infectieuses et tropicales*  
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# Faculty/Presenter Disclosure

- **Faculty: Arnaud Gagneur**
- **Relationships with commercial interests:**

*Potential for conflict(s) of interest: Not Applicable*

# What would you spontaneously reply?

To a person who's ambivalent about the COVID-19 vaccine

- “There’s nothing reassuring about what I’ve read on the Internet. It’s not that I’m against it, I’ll get there at some point. The fact is, the vaccine was developed quickly and I don’t quite trust it.”
- You...

*HCPs challenges in vaccine hesitancy*

# Vaccine hesitancy problem 1 : The information paradox



## Traditional educational approach



Information, facts and education alone do not change beliefs or behavior

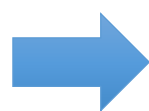


Ineffective and can back-fire and reinforce vaccine hesitancy

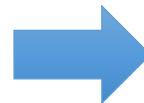
## Parents' views and experiences of communication about routine childhood vaccination

- Parents wanted more information than they were getting

- Balanced information about vaccination benefits and harms
- Presented clearly and simply
- Tailored to their situation
- In good time



How do we overcome the challenge of providing adapted factual information on vaccination to parents ?



WHAT  
HOW



Motivational  
interviewing  
approach

Sadaf F. Vaccine 2013

Kaufman J. et al., Cochrane Database of Systematic Reviews 2018

Nyhan B et al. Pediatrics. 2014

Dubé E. Clin Microbiol Infect. 2017

Ames H. et al., Cochrane Database of Systematic Reviews, 2017.

## Vaccine hesitancy problem 2 : Health care providers!

“Resistance” arises from interaction



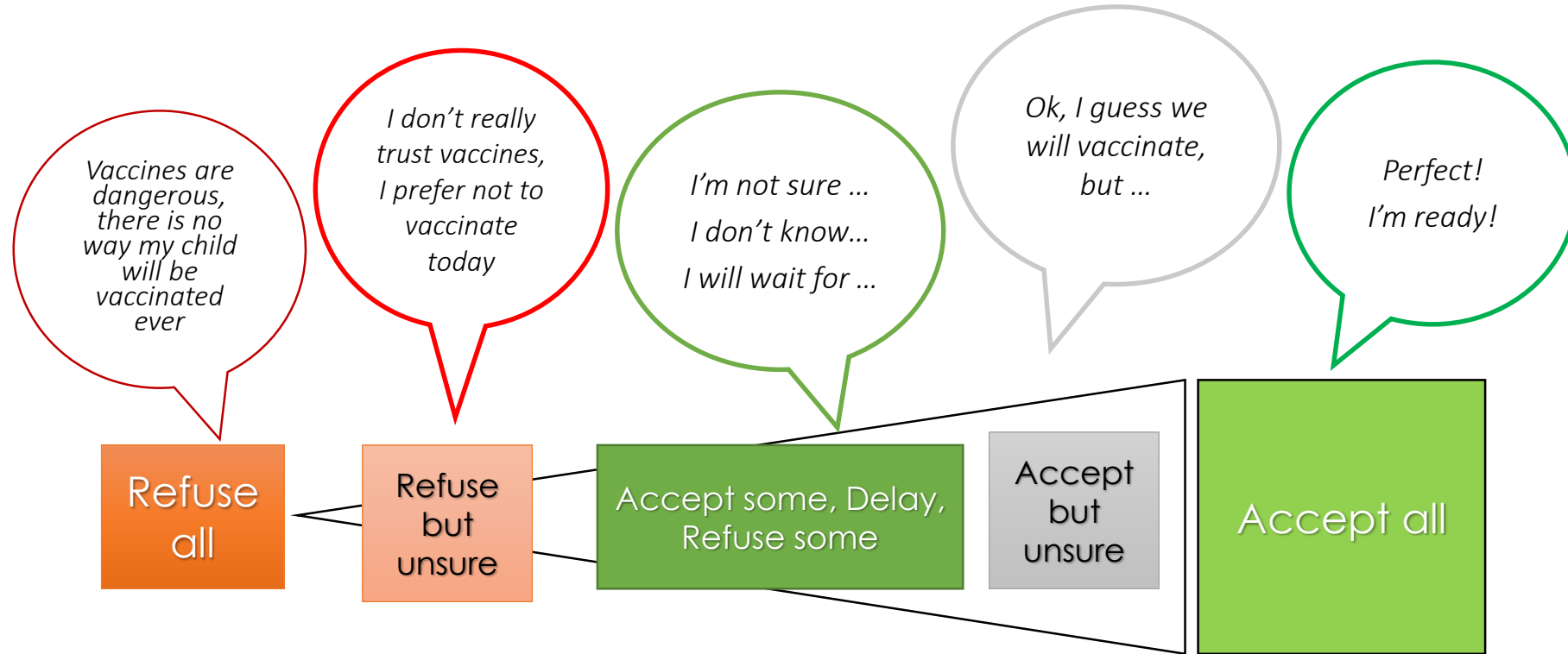
Clinicians often tend to want to “repair/restore/resolve” their clients’ problems.

This is the *righting reflex*



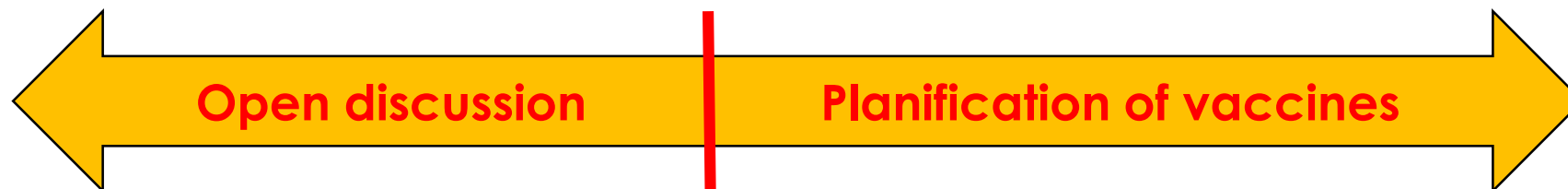
When the person doesn’t feel listened to, not understood and/or when their freedom to act or to think is threatened, the relationship becomes a struggle!

# Vaccine hesitancy problem 3: Is the patient hesitant?



**The continuum of Vaccine Acceptance**

**Goal of intervention**



# Vaccine hesitancy problem 4 : Can the patient change?

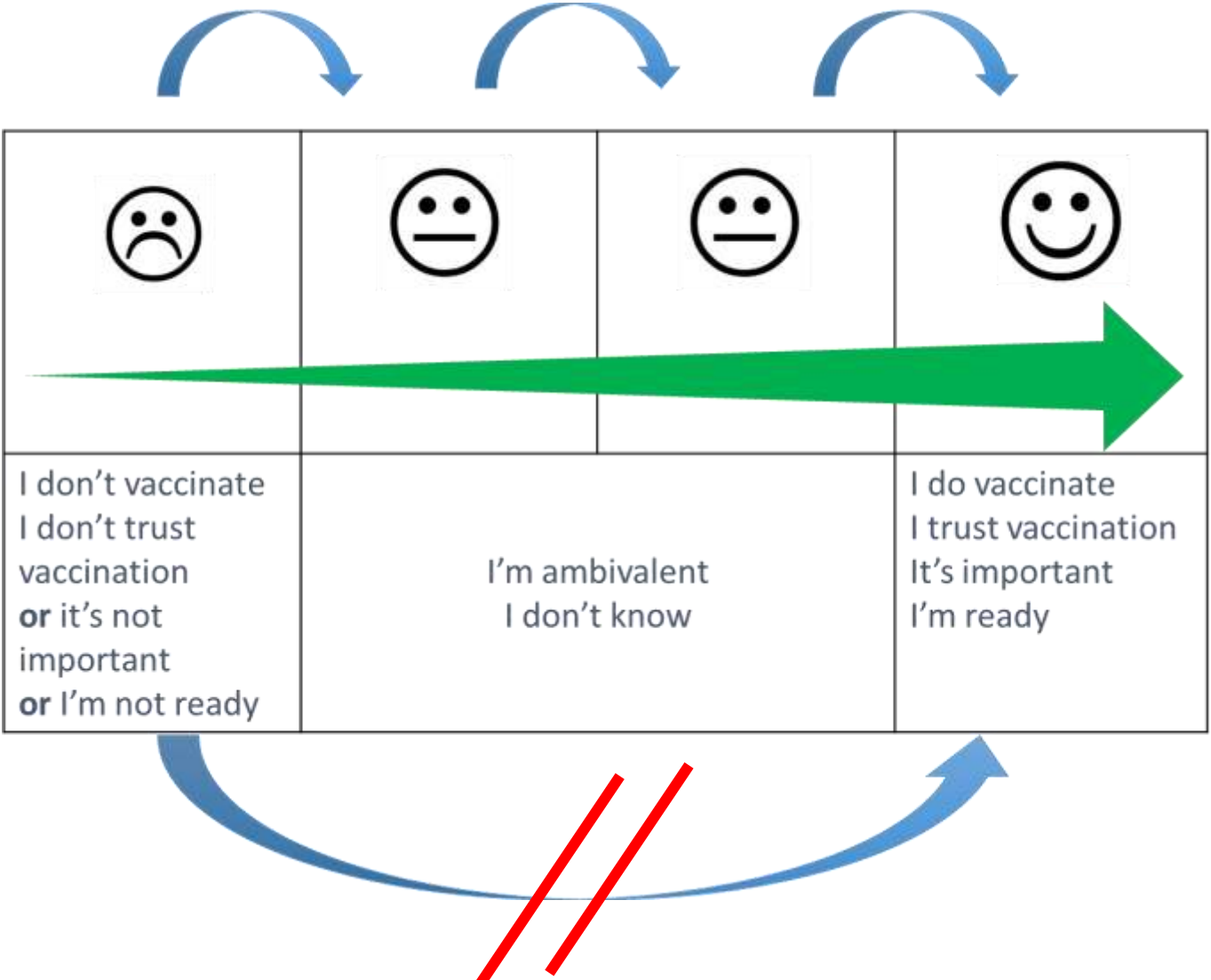
## What allows people to change?





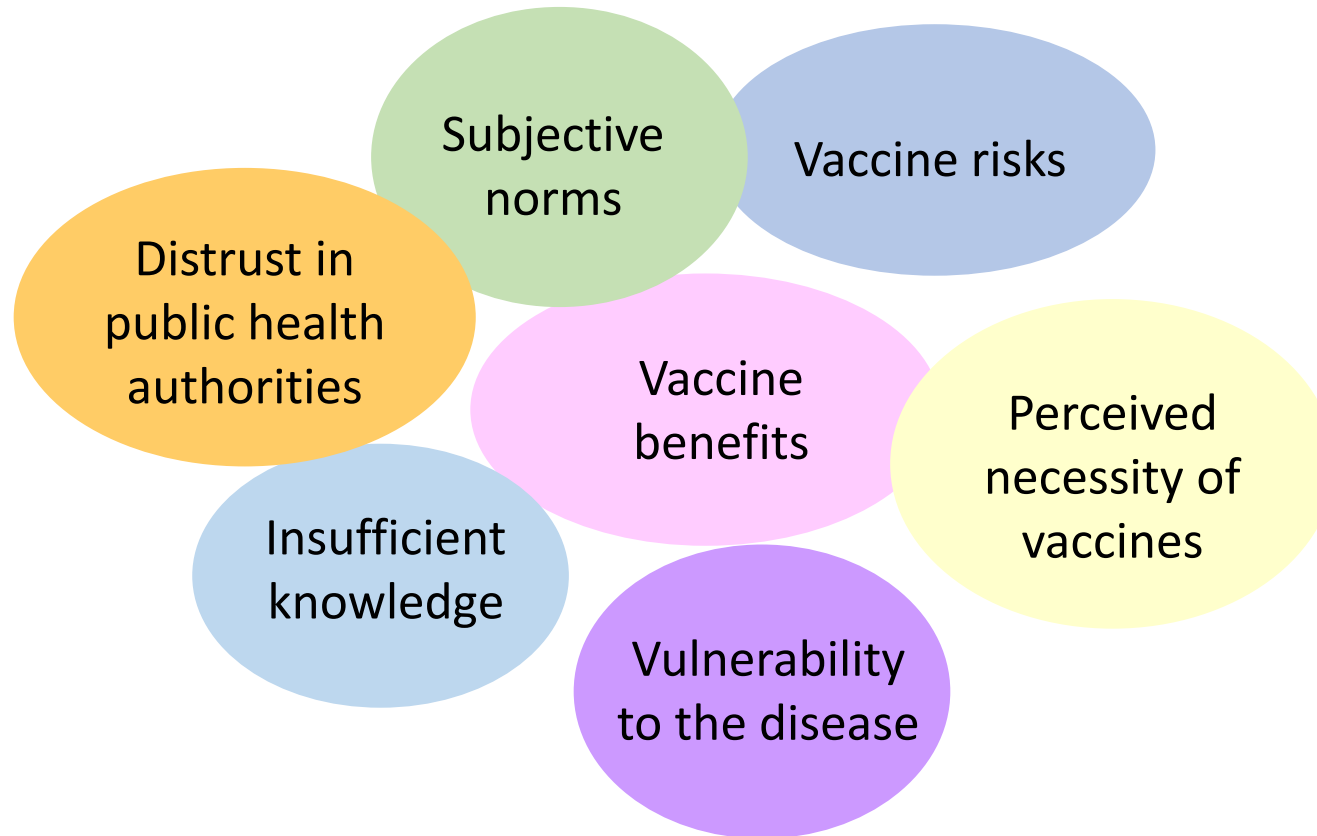
# Vaccine hesitancy problem 5 : How to help the patient change?

A discussion about change : step by step ...

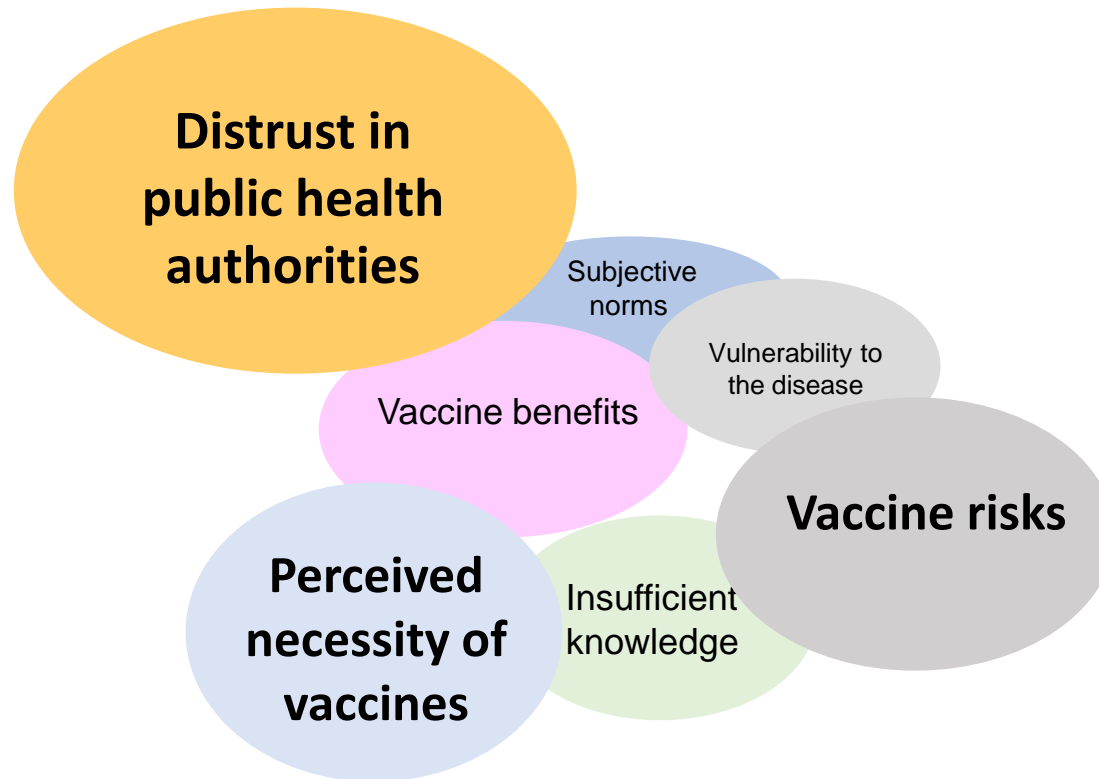


# Vaccine hesitancy problem 6: Why the is patient hesitant?

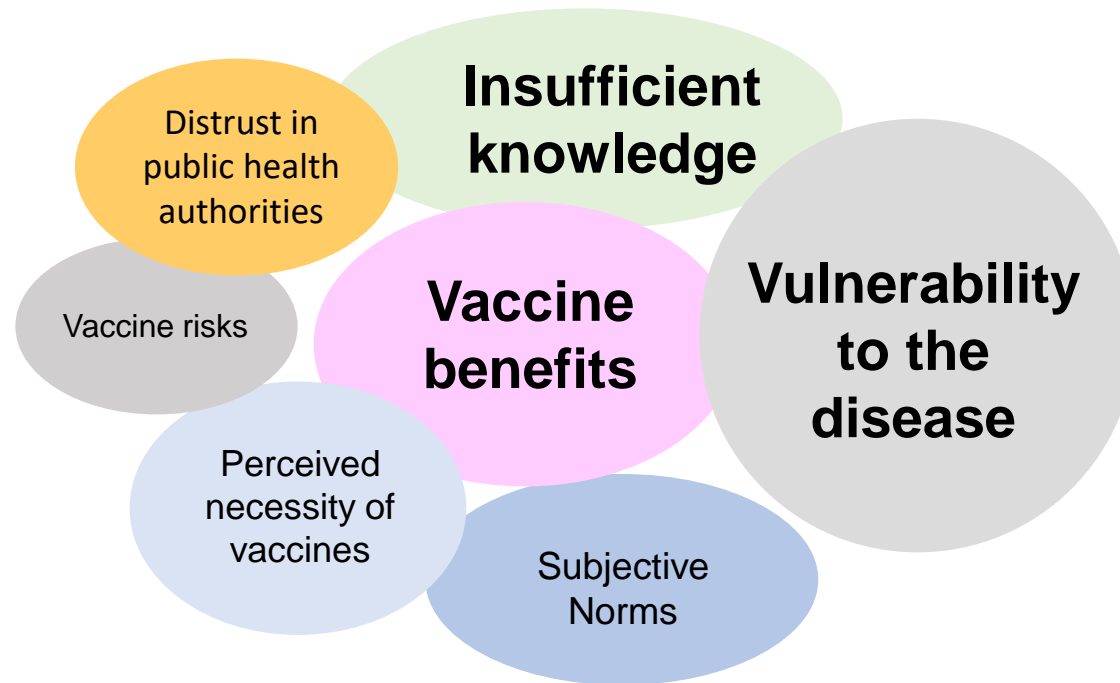
## Determinants of vaccination behaviour (GLOBAL)



# Determinants of vaccination behaviour (People A)



# Determinants of vaccination behaviour (People B)



# HCP challenges

- Giving more and more information in a directive way does not work and generate resistance
- HCPs should adapt to the specific needs of patients in order to help and support them in their decision to vaccinate
  - Adapt the goal of the intervention according to the patient's level of hesitation
  - Adapt to the patient's ability of change: to avoid resistance and discord and to establish a relationship of trust
  - Find which information are relevant for this specific patient and will reinforce its perception of the importance of vaccination

Is it possible ?

One size  
does **NOT**  
fit all.



# MOTIVATIONAL INTERVIEWING



*Effectiveness of MI in vaccine hesitancy*



- ➔ Need for an early strategy of promoting vaccination to avoid delays in first vaccines
    - First vaccines at 2 months of age
    - Delays in first vaccines were associated with delayed or incomplete vaccination schedule in childhood
    - Nurseries should be a place for a early strategy of promoting vaccination
  
  - ➔ Failure of traditional educational or information's strategies
- Motivational Interviewing should be adapted to vaccination promotion

## The PromoVac strategy

To provide to parents an educational intervention at birth using a MI approach in order to increase vaccine acceptance

*Gagneur et al. J Infect Dis Ther 2018*

*Gagneur et al. A postpartum vaccination promotion intervention using motivational interviewing techniques improves short-term vaccine coverage: PromoVac study. BMC Public health 2018*

*Gagneur et al. Promoting vaccination in the province of Québec: the PromoVaQ randomized controlled trial protocol. BMC Public Health 2019*

*Gagneur et al. Motivational interviewing: A promising tool to address vaccine hesitancy. Vaccine 2018*

*Lemaitre et al. Impact of a vaccination promotion intervention using motivational interview techniques on long-term vaccine coverage: the PromoVac strategy. Human Vaccin Immunother. 2019*

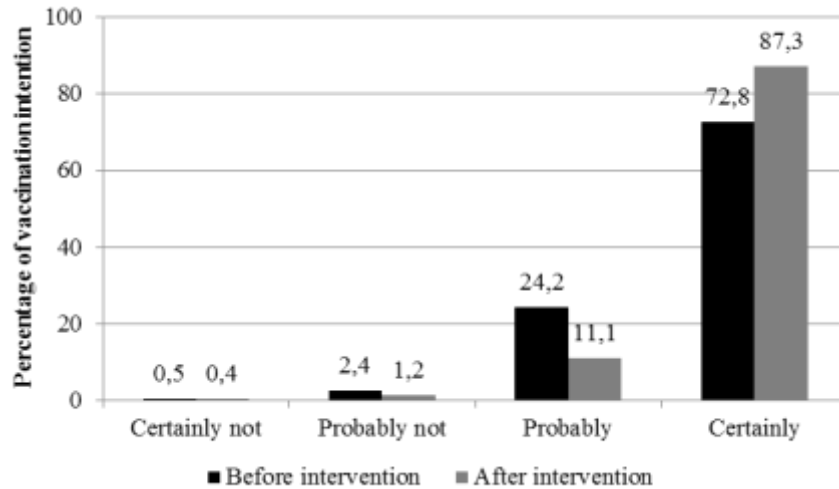
*Gagneur et al. Promoting vaccination in maternity wards – motivational interview technique reduces hesitancy and enhances intention to vaccinate, results from a multicentre non-controlled pre- and post-intervention RCT-nested study. Eurosurveillance 2019*

*Gagneur A et al. A complementary approach to the vaccination promotion continuum: An immunization-specific motivational-interview training for nurses. Vaccine. 2019*

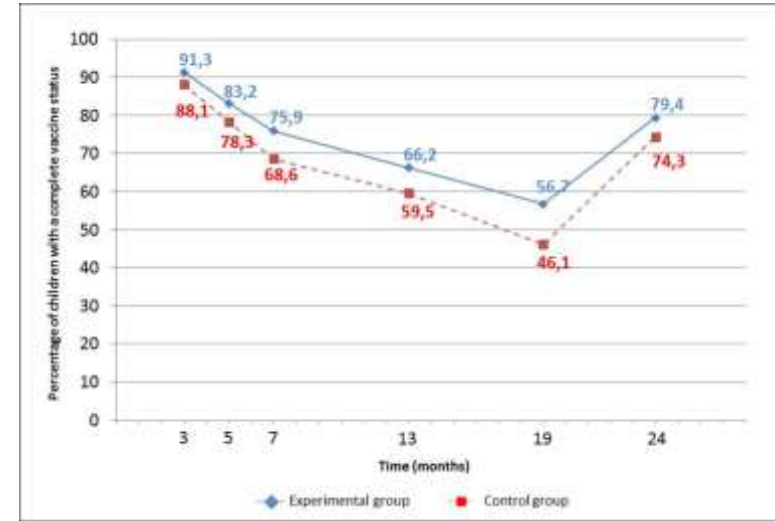
*Gagneur A. Motivational interviewing: A powerful tool to address vaccine hesitancy. Can Commun Dis Rep. 2020 Apr 2;46(4):93-97*

# Eastern Township regional cohort study (n=1140)

## Impact on parental vaccination intention and infants' vaccination coverage



Increase of parental vaccination intention : + 15%



RR (95% CI)	p
1.09 (1.05-1.13)	<0.001

Univariate logistic regressions with repeated measures according to the Generalized estimating equations (GEE) procedure with Poisson distribution : To estimate the chance for a child to have a complete vaccine status during early childhood

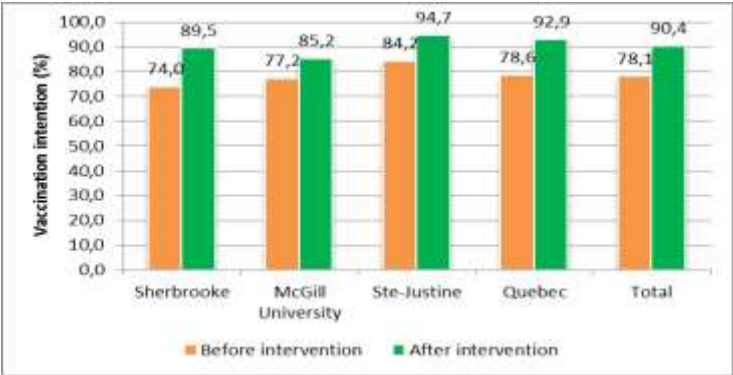
Gagneur et al. *J Infect Dis Ther* 2018.

Gagneur A et al. *BMC Public Health* 2018

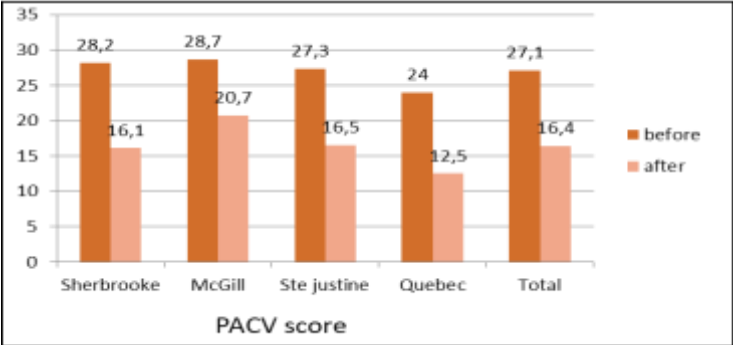
Lemaitre et al. *Human Vaccin Immunother* 2019

# Quebec Provincial RCT (n= 2695)

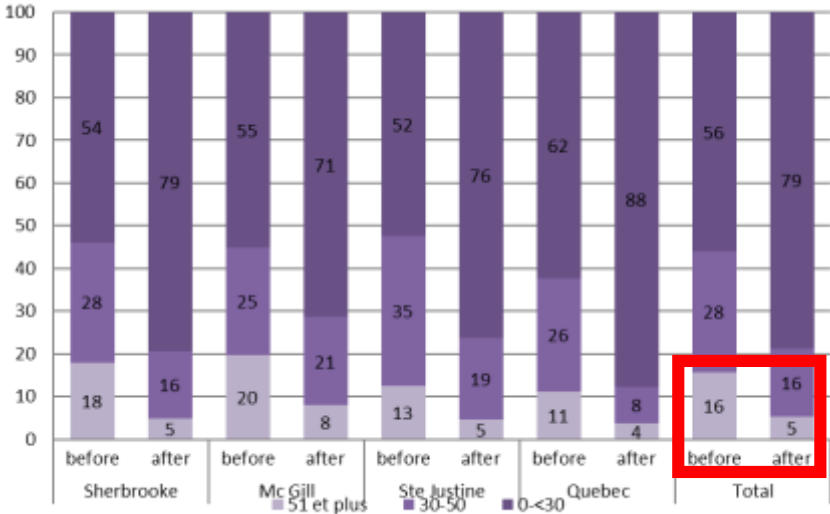
## Impact on parents' vaccination intention and hesitancy



Increase in parental vaccine intention: +12%



Decrease of Vaccine hesitancy score: - 40%



Major impact on parent with high level of vaccine hesitancy : ÷ 3

Gagneur A et al. Eurosurveillance 2019



# PROGRAMME **emmie**

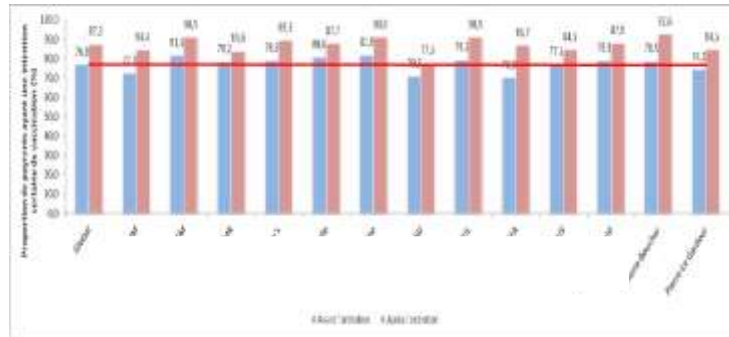
ENTRETIEN MOTIVATIONNEL EN MATERNITÉ  
POUR L'IMMUNISATION DES ENFANTS

Offer to all parents, during the stay in maternity wards, an open exchange on vaccination to support their decision in order to provide the best protection while increasing immunization coverage for all children in Quebec

# Effectiveness

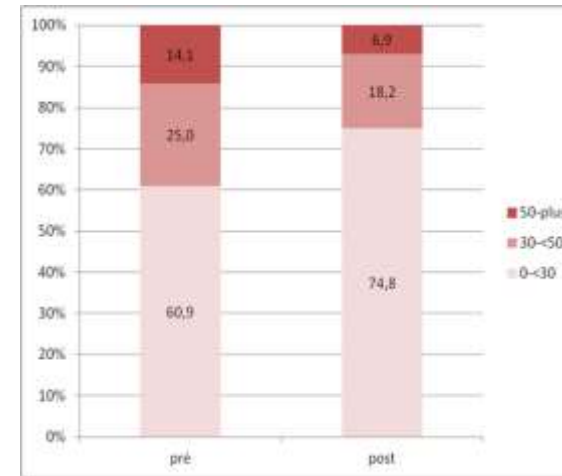
n=6330

## Impact on vaccination intention

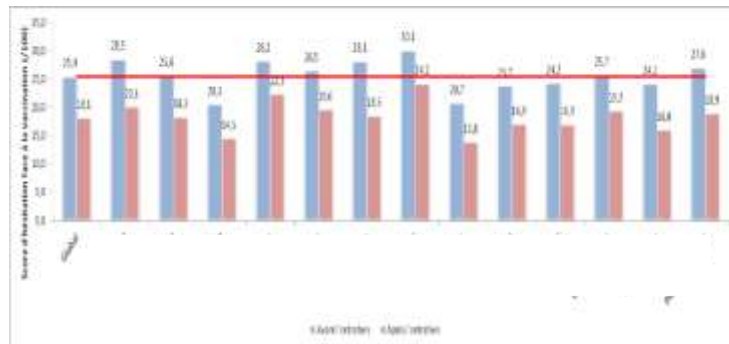


A significant increase in vaccination intention was observed in each center after the intervention, with a global increase of 10,5% (5,5-16,7%;  $p < 0.0001$ ).

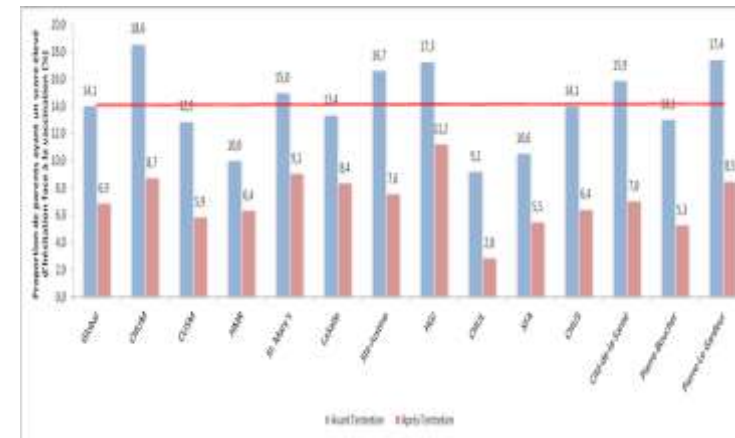
## Impact on high level of vaccine hesitancy score



## Impact on parental vaccine hesitancy score



A significant decrease in hesitancy score was observed in each maternity ward after the intervention, with a global decrease of 29% (19-34%;  $p < 0.0001$ ).



Preliminary results

# Effectiveness

## Impact on vaccine coverage (Provincial immunization registry)

	6 regions targeted by the program		12 regions not targeted by the program		Difference in differences OR (95% CI)
	3 months VC % (n)	OR (95% CI)	3 months VC % (n)	OR (95% CI)	
Pre-implementation period	86.8 (28,977)	1.30 (1.24-1.37)	85.8 (16,046)	1.05 (0.99-1.11)	1.23 (1.14-1.33)
Post-implantation period	89.6 (29,089)		86.4 (15,437)		

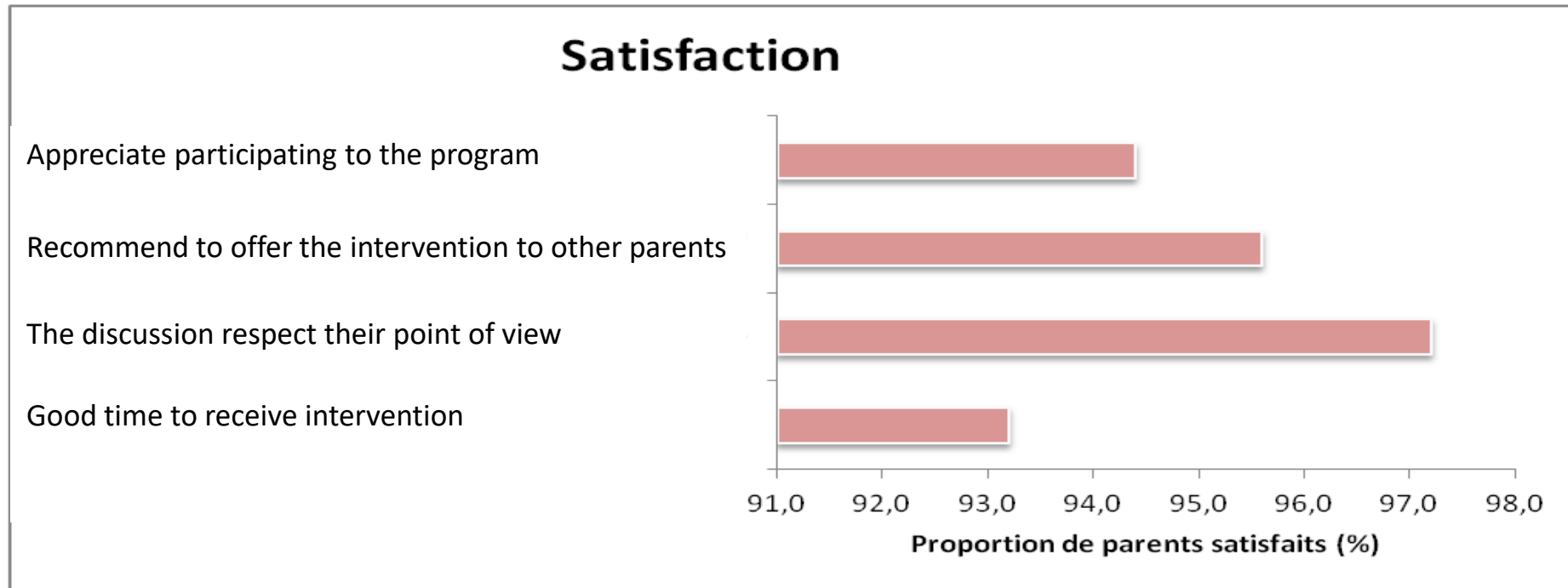
Method 1: 3 months VC by regions - Pre-post analysis

Region	7 months VC		VC Différence %	p value
	Program group % (n)	Control group % (n)		
03	79,0 (3 071)	72,8 (1 589)	+ 6,2	<0,0001
05	77,5 (935)	71,8 (1 775)	+ 5,7	0,0002
06	68,5 (3 089)	60,0 (6 680)	+ 8,5	<0,0001
13	72,4 (436)	73,0 (1 729)	- 0,6	0,80
14	79,1 (1 333)	74,2 (1 922)	+ 4,9	0,0002
16	69,4 (1 060)	72,5 (6 906)	- 3,1	0,012
<b>Total</b>	<b>74,0 (9 924)</b>	<b>68,1 (20 601)</b>	<b>+ 5,9</b>	<b>&lt;0,0001</b>

Method 2: 7 months VC of infant exposed to the program

*Preliminary results*

## Parental satisfaction



n=6330

*MI in practice*



# VIDEO

- Loic's parents doesn't want to vaccinate him before the age of 2 years
- Vaccination counsellor in maternity wards intervention with MI use

## Part 1

# Summary of a MI approach with hesitant patient about immunisation

## 1. Establish a relationship of trust

- ✓ MI spirit: Non-judgmental, accepting hesitation, being curious about their beliefs and position
- ✓ Don't try to correct misinformation at first
- ✓ Do not try to convince with more arguments
- ✓ Let people express their fears and concerns
- ✓ Empathy (showing people that you understand and want to help them) = the most effective way to move towards change

## 2. Understand the specific determinant of the person's hesitation

- ✓ Open-ended questions, Complex reflect
- ✓ Targeting what specific relevant information will be provided to this person to increase their perception of the importance of vaccination

# VIDEO

- Loic's parents doesn't want to vaccinate him before the age of 2 years
- Vaccination counsellor in maternity wards intervention with MI use

## Part 2

# Summary of a MI approach with hesitant patient about immunisation

1. Establish a relationship of trust
2. Understand the specific determinant of the person's hesitation
3. Offer the information
  - ✓ Ask-Offer-Ask: always ask permission before giving information (arouse curiosity)
  - ✓ Co-building new knowledge in partnership that will increase the perception of the importance of vaccination
  - ✓ Spinoza: “You can only change a belief or a thought by something that makes more sense than the belief to be changed”
4. Respect the autonomy of the person
  - ✓ I am confident that you will do what you think is the best choice



## The vaccine whisperers: Counselors gently engage new parents before their doubts harden into certainty

Eric Boodman, STATnews, August 5<sup>th</sup> 2019

The counselors are themselves a kind of prophylaxis. Their job is to ask about parents' worries long before anyone's trying to vaccinate their kids.

*"It might seem risky, not to challenge erroneous and potentially dangerous beliefs head-on. To Savard (Vaccination counsellor), though, the bigger risk is breaching the relationship of trust he's carefully built. As he put it, **"If you start judging parents' opinions, if you start contradicting what they've said, you've already lost them."** ...*

*"They talked for over an hour beside Tobie's bed. Gagneur (...) was honest, that he worried about unvaccinated children, but he didn't press her to make a decision: "I told her, 'I'll leave you to think about it.'" .... That felt foreign to her. "Once we were done, he told me that, whether I chose to vaccinate or not, he respected my decision as someone who wanted the best for my kids," she remembered. **"Just that sentence — to me, it was worth all the gold in the world."***

# Next steps

1. EMMIE program
  - ✓ 200 VaC in all maternity wards across the province
  - ✓ Intervention by zoom platform
2. PromoVac pilot study in France
3. UNICEF – HCPs training in Romania
4. US-CDC - 11-module training package on applying MI-techniques to support peer-to-peer vaccine conversations
5. Faculty of Medicine of Marseille (France) – Integrating MI training in immunization into family physicians resident curriculum
6. Marseille regional Health agency– Street social worker training to increase COVID vaccine acceptance in marginalized population
7. Guyane – France (Santé Publique France) – Pilot project to increase COVID vaccine acceptance by training local mediators.

# Next steps

## 8. MIICOVAC pilot project

- ✓ PHAC – IPF
- ✓ Virtual interventions through the zoom platform with the hesitant population that has not been vaccinated and with parents who are reluctant to vaccinate their child
- ✓ Logistical support from CanVax
- ✓ Booking appointments on the CanVax website
- ✓ 15 immunization consultants will be trained in MI
- ✓ Interventions will be conducted from April to September 2022
- ✓ All health care professionals will be offer to refer their hesitant patients to the Canvax website so that they can make an appointment with a counselor

# What would you spontaneously reply?

To a person who's ambivalent about the COVID-19 vaccine

- “There’s nothing reassuring about what I’ve read on the Internet. It’s not that I’m against it, I’ll get there at some point. The fact is, the vaccine was developed quickly and I don’t quite trust it.”
- You...