

# Immunization Communication



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**Letting memes  
run their natural  
life cycle**



**Vaccinating  
memes so they  
last longer**



**Vaccinating  
memes so they  
become more  
autistic**

# What are Vaccines?

- Invented by Edward Jenner, 1796
- Derived from small amounts of weak or dead germs.
- They train the immune system to recognize and combat pathogens without exposing the body to real symptoms.
- Herd Immunity
- Antibiotic resistance



# Controversy of Vaccines



Public Health England

#ValueofVaccines

Vaccines save lives

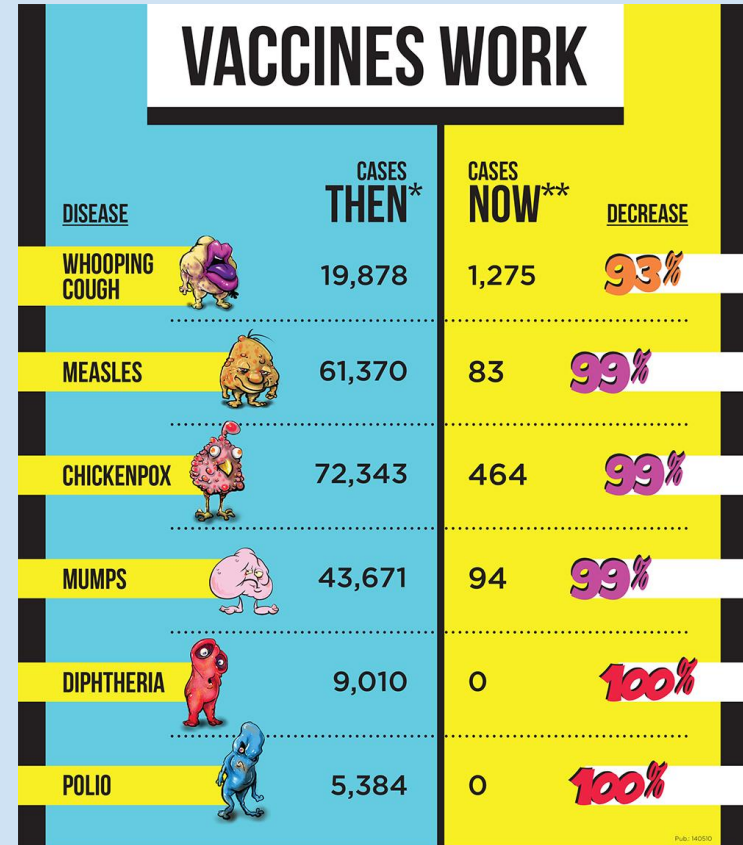
After clean water,  
vaccination is the most  
effective public health  
intervention in the world



1. “Diseases had already begun to disappear because of better hygiene and sanitation, not because of vaccines”
2. “The majority of people who get diseases have been vaccinated”
3. “There are “hot lots” of vaccine that have been associated with more adverse events and deaths than others”
4. “Vaccines cause many harmful side effects, illnesses, and even death”
5. “Vaccine-preventable diseases have been virtually eliminated from my country, so there is no need for my child to be vaccinated”
6. “Giving a child multiple vaccinations forcan overload the immune system and increase harmful side effects. “

# Hypothesis

If we can find a method of communication between health physicians and patients that can showcase the health benefits of vaccines without receiving negative connotation, than the risk of major infections and diseases spreading will be limited.

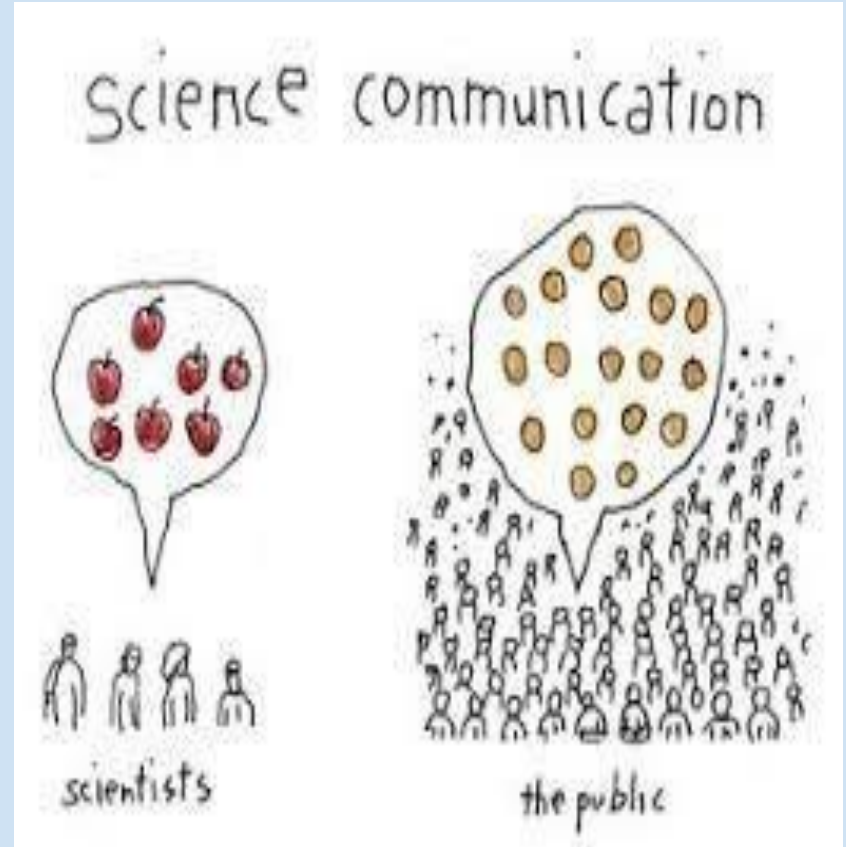


\* Highest number of cases in a single year in the five years preceding vaccine introduction.

\*\* Data for measles are from the Canadian Measles and Rubella Surveillance System (CMRSS). All other data are from the Canadian Notifiable Disease Surveillance System (CNDS). Most recent report of cases in Canada in 2013. 2013 is the most recent validated data available for publication.

# Purpose

- The purpose of the study is to find the right way to communicate to people the importance of getting vaccinated.
- If we can better communicate with the general public about vaccines, then vaccine rates will increase.



# Making Vaccine Messaging Stick: Perceived Causal Instability as Barrier to Effective Vaccines Messaging

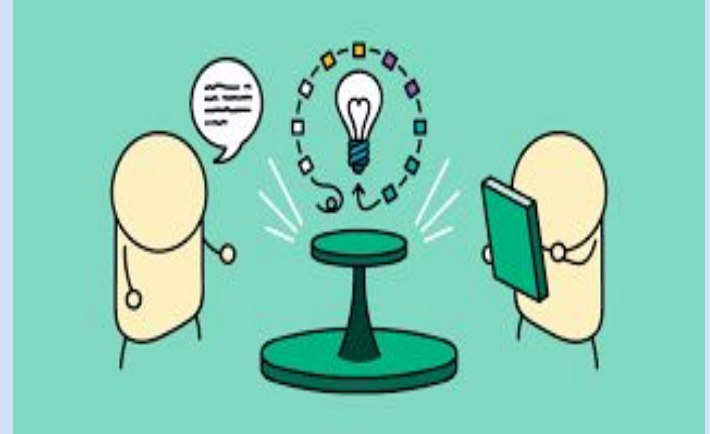


Effective communication between healthcare professionals and patients can be a difficult task. In a study conducted by Graham N. Dixon, loss frame messaging is utilized to ascertain the mechanisms behind failed persuasive attempts relative to vaccines.

# Methods

## Participants

- N= 161
- 48.4% Male
- 80% White
- Mean age 35.01



Independent variable: Participants    Dependent variable: Reactions

## Procedure

- Participants were randomly assigned to read a message and then answer survey items measuring negative affect, perceived causal attribution, and message quality.
- The study used a paragraph-long message discussing the negative outcome associated with a flu vaccine for both action and inaction.



# Measures

Participants were asked to rate the level of intensity using a 4-item negative affect scale.

1. Irritation
2. Guilt
3. Sadness
4. Worry

Causal attribution was measured using a three-dimension scale.

1. Locus of Causality
2. Causal Stability
3. Personal Control

# Hypotheses of the Study

There are five hypothesis that were tested in this experiment



Key

M: Mean

SD: Standard Deviation

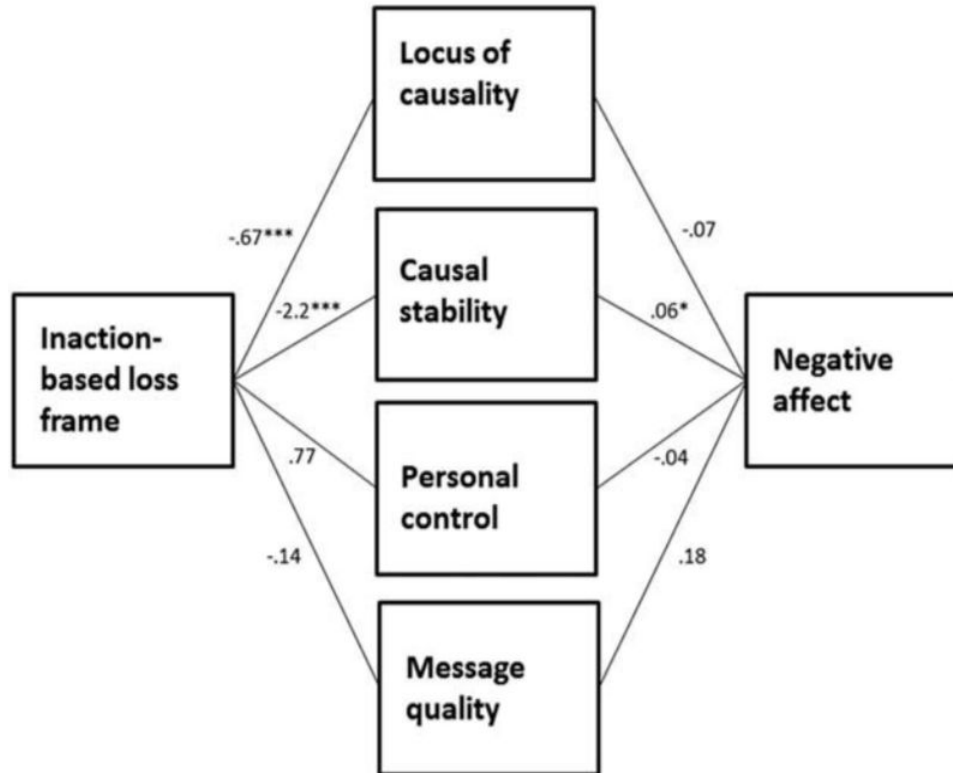
CI: Confidence level

Cohen's d: Effect size

# Results of the 4/5 Hypothesis'

	Hypothesis 1	Hypothesis 2	Hypothesis 3	Hypothesis 4
M:	<b>Inaction-based</b> 2.63 <b>Action-based</b> 2.95	<b>Inaction-based</b> 2.85 <b>Action-based</b> 3.52	<b>Inaction-based</b> 6.52 <b>Action-based</b> 6.52	<b>Inaction-based</b> 8.43 <b>Action-based</b> 7.65
SD:	<b>Inaction-based</b> 1 <b>Action-based</b> 1	<b>Inaction-based</b> .94 <b>Action-based</b> .93	<b>Inaction-based</b> 3.3 <b>Action-based</b> 2.1	<b>Inaction-based</b> 2.5 <b>Action-based</b> 2.88
CI:	t(159)= -1.99 p = .048	t(159)= -4.55 p < .001	t(127.55)= 5.1 p < .001	t(157.632)= 1.83 p = .07
Cohen's d	.32	.73	.8	-.061 , 1.61

# Hypothesis 5 Solution

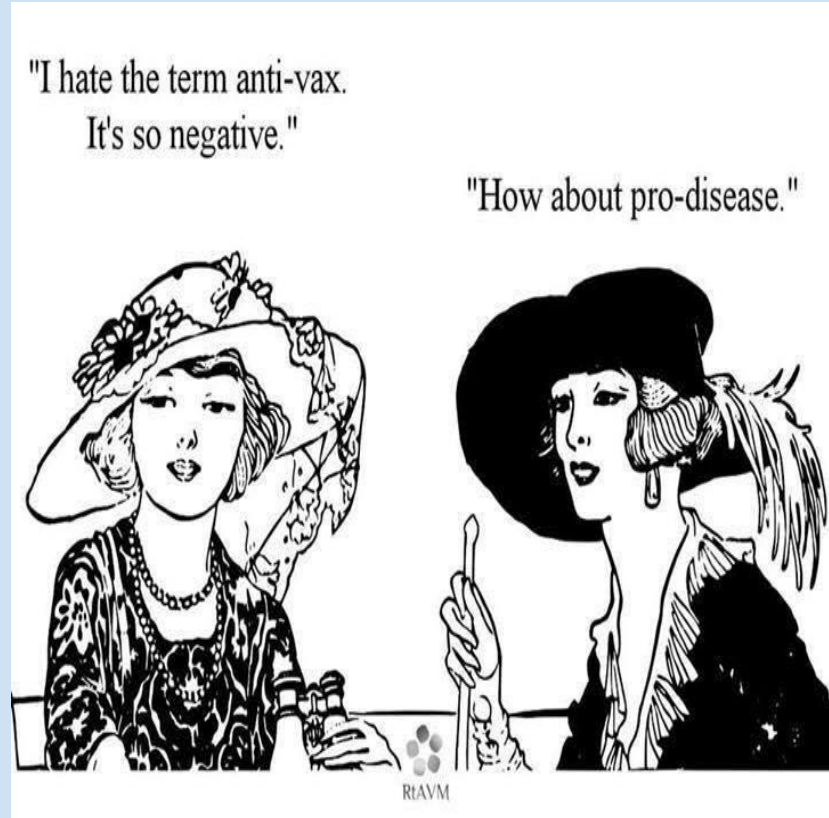


# Discussion

Health professionals and scientists are primary sources for vaccine information today.

When things are controllable, people respond in a positive manner.

In order for people to understand, scientists must first deliver in a way that appeals to their needs.



**Kid:** \*turns 3 years old\*

**Anti-vax parents:**



**Okay, get in**

# Anti-Vaxxers and Antibiotics

- 1) Religion: One of the most common reasons parents offer for choosing not to vaccinate their children
- 2) Personal/Philosophical: common reason
- 3) Safety: potentially the greatest, reason parents express for refusing vaccinations
- 4) Educational Outreach: fourth common thread

Antibiotic consumption has caused a chain growth of bacteria resistant diseases in our bodies.

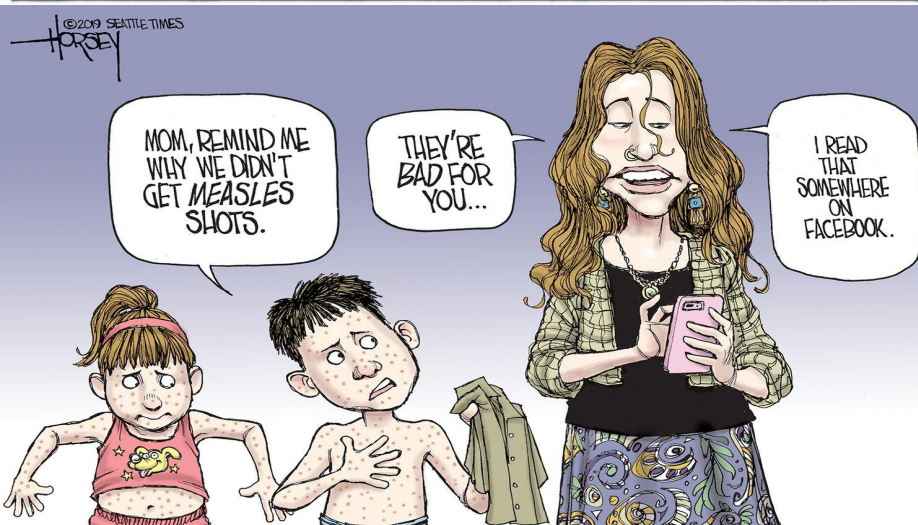
Antibiotic-resistant infections have led to the evolution of “superbugs”. Vaccinations have been proven to be much more effective than antibiotics in combating AMR



## NATIONAL IMMUNIZATION SCHEDULE

Age	Vaccine
1. At birth	BCG, OPV-0 , Hep B-0
2. 6 weeks	OPV-1, pentavalent-1
3. 10 weeks	OPV-2, , pentavalent-2
4. 14 weeks	OPV-3, , pentavalent-3
5. 9 months	Measles-1, Vitamin A-1
6. 16-24 months	DPT booster, OPV booster, measles 2 <sup>nd</sup> dose, Vitamin A 2 <sup>nd</sup> dose
7. 5-6 Years	DPT Booster
8. 10 & 16 years	TT
9. Early in pregnancy	TT-1
10. 4 weeks after TT-1	TT-2
11. If received 2 TT doses in a pregnancy within last 3 years	TT booster

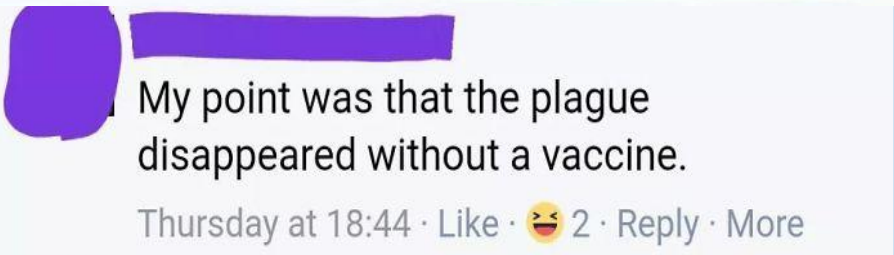




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**KEEP  
CALM  
AND  
GET  
VACCINATED**

Anti-vaxxer logic

